

# ***STIC Search Report***

***EIC 1700***

**STIC Database Tracking Number: 177255**

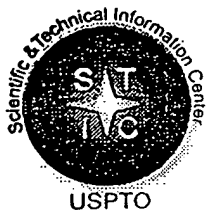
**TO: Satya Sastri  
Location: REM 10A30  
Art Unit : 1713  
January 25, 2006**

**Case Serial Number: 10/774617**

**From: Les Henderson  
Location: EIC 1700  
REM 4B28 / 4A30  
Phone: 571-272-2538**

**Leslie.henderson@uspto.gov**

## **Search Notes**



# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 1713  
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Satya Artri Examiner #: 79815 Date: \_\_\_\_\_  
Art Unit: \_\_\_\_\_ Phone Number 30 \_\_\_\_\_ Serial Number: 101774, 617  
Mail Box and Bldg/Room Location: Cm 10A30 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Water-whitening resistant protein-sensitive adhesives

Inventors (please provide full names): Lee Phong Lee

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>24</u>	NA Sequence (#) _____	STN <u>\$1382.44</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic <input checked="" type="checkbox"/>	Dr.Link _____
Date Completed: <u>1/25/06</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>120</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: <u>30</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>330</u>	Other _____	Other (specify) _____

**Banks, Kendra**

US 2005 0 176876

111255

**From:** Sastri, Satya  
**Sent:** Monday, January 23, 2006 12:08 PM  
**To:** STIC-EIC1700  
**Subject:** Database Search Request, Serial Number: 10774617

**Requester:**  
SATYA SASTRI (P/1713)  
**Art Unit:**  
GROUP ART UNIT 1713  
**Employee Number:**  
79815  
**Office Location:**  
REM 10A30  
**Phone Number:**  
(571)272-1112  
**Mailbox Number:**

SCIENTIFIC REFERENCE BR  
Sci & Tech Inf - Cnt

JAN 23 2006

Pat. & T.M. Office

**Case serial number:**  
10774617  
**Class / Subclass(es):**

**Earliest Priority Filing Date:**  
Feb. 9, 2004  
**Format preferred for results:**  
Paper

**Search Topic Information:**  
composition comprising copolymer formed from monomers recited in claim 1, 10, 23, 31 and 34. Specific examples to aid the search in claims 10 and 34 may be : ethylimidazoline methacrylate as alkylimidazoline (meth)acrylate (trade name compound : NORSOCRYL); trifluorethyl methacrylate as trifluoroalkyl (meth)acrylate (trade name MATRIFE), methyl methacrylate or styrene or hexyl methacrylate or isobutyl methacrylate or ethyl methacrylate or n-butyl methacrylate as hard monomer; 2-ethylhexyl acrylate or tert. butyl acrylate as soft monomers. Please search with generic monomers for claim 1.

**Special Instructions and Other Comments:**  
Mon, Wed, Fridays between 10 and 4pm.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov



Bib Data Sheet

CONFIRMATION NO. 8682

SERIAL NUMBER 10/774,617	FILING DATE 02/09/2004  RULE	CLASS 524	GROUP ART UNIT 1713	ATTORNEY DOCKET NO. 51529/JDC/A23
-----------------------------	---------------------------------------	--------------	------------------------	---

APPLICANTS

Sou Phong Lee, Arcadia, CA;

\*\* CONTINUING DATA \*\*\*\*\*

\*\* FOREIGN APPLICATIONS \*\*\*\*\*

IF REQUIRED, FOREIGN FILING LICENSE GRANTED  
 \*\* 05/06/2004

Foreign Priority claimed 35 USC 119 (a-d) conditions met	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance	STATE OR COUNTRY CA	SHEETS DRAWING 5	TOTAL CLAIMS 48	INDEPENDENT CLAIMS 5
---	---	---------------------------	------------------------	-----------------------	----------------------------

Verified and Acknowledged

Examiner's Signature \_\_\_\_\_ Initials \_\_\_\_\_

ADDRESS  
 23363  
 CHRISTIE, PARKER & HALE, LLP  
 PO BOX 7068  
 PASADENA , CA  
 91109-7068

TITLE  
 Water-whitening resistant pressure-sensitive adhesive

FILING FEE  RECEIVED 1880	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees
		<input type="checkbox"/> 1.16 Fees ( Filing )
		<input type="checkbox"/> 1.17 Fees ( Processing Ext. of time )
		<input type="checkbox"/> 1.18 Fees ( Issue )
		<input type="checkbox"/> Other _____

#### ABSTRACT OF THE DISCLOSURE

Pressure-sensitive adhesive compositions that resist water-whitening are provided. The compositions comprise emulsion copolymers formed from a plurality of monomers that includes a plurality of (meth)acrylic monomers, at least one trifluoroalkyl (meth)acrylate monomer, and at  
5 least one alkylimidazolidone (meth)acrylate monomer. Preferably, the (meth)acrylic monomers comprise a plurality of soft monomers, at least one hard monomer and at least one acid monomer. The plurality of monomers may further include at least one aliphatic urethane di(meth)acrylate, an oligomer. The pressure-sensitive adhesive composition also comprises a surfactant system including at least one surfactant.

WHAT IS CLAIMED IS:

1. A pressure-sensitive adhesive composition comprising a copolymer formed from a plurality of monomers that includes:
  - (a) a plurality of (meth)acrylic monomers;
  - 5 (b) at least one trifluoroalkyl (meth)acrylate monomer; and
  - (c) at least one alkylimidazolidone (meth)acrylate monomer.

*signature*  
L 7
2. A pressure-sensitive adhesive composition according to claim 1, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate.
- 10 3. A pressure-sensitive adhesive composition according to claim 1, wherein the at least one trifluoroalkyl (meth)acrylate monomer comprises trifluoroethyl methacrylate.
4. A pressure-sensitive adhesive composition according to claim 1, wherein the at least one alkylimidazolidone (meth)acrylate monomer comprises ethylimidazolidone methacrylate.
- 15 5. A pressure-sensitive adhesive composition according to claim 2, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.
- 20 6. A pressure-sensitive adhesive composition according to claim 1, further comprising a surfactant system comprising at least one surfactant.
- 25 7. A pressure-sensitive adhesive composition according to claim 6, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.
- 30 8. A pressure-sensitive adhesive composition according to claim 6, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.

9. A pressure-sensitive composition according to claim 1, wherein the composition is crosslinked with at least one crosslinking agent.

10. A pressure-sensitive adhesive composition comprising a copolymer formed from a plurality of monomers that includes:

- (a) a plurality of soft monomers;
- (b) at least one hard monomer;
- (c) at least one acid monomer;
- (d) at least one trifluoroalkyl (meth)acrylate monomer; and
- (e) at least one alkylimidazolidone (meth)acrylate monomer.

11. A pressure-sensitive adhesive composition according to claim 10, wherein the plurality of soft monomers is selected from the group consisting of alkyl acrylates having 4 to 12 carbon atoms in the alkyl group.

12. A pressure-sensitive adhesive composition according to claim 10, wherein the plurality of soft monomers comprises 2-ethylhexyl acrylate and butyl acrylate.

13. A pressure-sensitive adhesive composition according to claim 10, wherein the at least one hard monomer is selected from the group consisting of styrene, methyl methacrylate, n-hexyl methacrylate, ethyl methacrylate, isobutyl methacrylate, and n-butyl methacrylate.

14. A pressure-sensitive adhesive composition according to claim 10, wherein the at least one hard monomer comprises styrene and methyl methacrylate.

15. A pressure-sensitive adhesive composition according to claim 10, wherein the at least one acid monomer is selected from the group consisting of methacrylic acid, acrylic acid, itaconic acid and fumaric acid.

16. A pressure-sensitive adhesive composition according to claim 10, wherein the at least one acid monomer comprises methacrylic acid and acrylic acid.

17. A pressure-sensitive adhesive composition according to claim 10, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate.

~~L85~~ L71

5 18. A pressure-sensitive adhesive composition according to claim 17, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.

~~L85~~

19. A pressure-sensitive adhesive composition according to claim 10, further comprising a surfactant system comprising at least one surfactant.

10

20. A pressure-sensitive adhesive composition according to claim 19, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.

15

21. A pressure-sensitive adhesive composition according to claim 19, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.

22. A pressure-sensitive adhesive composition according to claim 10, wherein the composition is crosslinked with at least one crosslinking agent.

20

23. A pressure-sensitive adhesive composition comprising an emulsion copolymer formed from a plurality of monomers that includes:

(a) 2-ethylhexyl acrylate;

(b) butyl acrylate;

(c) methyl methacrylate;

(d) styrene;

(e) methacrylic acid;

(f) acrylic acid;

(g) trifluoroethyl methacrylate; and

(h) ethylimidazolidone methacrylate.

L29

L39

L209

L38 L49

L71 L59 L169

L42 L71 L63 L42

L156

156

155 sty

L51 L63 L65

L74 L81 L77

L74 L81 L77

L84

L10 L86

L9

L216

24. A pressure-sensitive adhesive composition according to claim 23, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate.

5 25. A pressure-sensitive adhesive composition according to claim 24, wherein the at least one aliphatic urethane di(meth)acrylate comprises aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.

26. A pressure-sensitive adhesive composition according to claim 23, further  
10 comprising a surfactant system comprising at least one surfactant.

27. A pressure-sensitive adhesive composition according to claim 26, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.

15

28. A pressure-sensitive adhesive composition according to claim 26, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.

29. A pressure-sensitive adhesive composition according to claim 23, wherein the  
20 plurality of monomers further includes at least one chain transfer agent.

30. A pressure-sensitive adhesive composition according to claim 23, wherein the composition is crosslinked with at least one crosslinking agent.

25 31. A pressure-sensitive adhesive composition according to claim 23, wherein the plurality of monomers, on percent-by-weight basis, based on the total weight of monomers, consists essentially of:

- (a) about 10% to 22% 2-ethylhexyl acrylate;
- (b) about 58% to 70% butyl acrylate;
- 30 (c) about 3% to 8% methyl methacrylate;
- (d) about 1% to 5% styrene;

- (e) about 2% to 5% methacrylic acid;
- (f) about 2% to 5% acrylic acid;
- (g) about 0.5% to 2.5% trifluoroethyl methacrylate; and
- (h) a positive amount up to about 1% ethylimidazolidone methacrylate.

5

32. A pressure-sensitive adhesive composition according to claim 31, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate, in a total amount of up to about 1.6% by weight.

10

33. A pressure-sensitive adhesive composition according to claim 32, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.

15

34. A pressure-sensitive adhesive composition comprising an emulsion copolymer formed from a plurality of monomers that includes, on a percent-by-weight basis, based on the total weight of monomers:

20

- (a) about 80% to 90% of a plurality of soft monomers;
- (b) about 3% to 10% of a plurality of hard monomers;
- (c) about 3% to 8% of a plurality of acid monomers;
- (d) a positive amount up to about 1% of at least one alkylimidazolidone (meth)acrylate monomer; and
- (e) about 0.5% to 2.5% of at least one trifluoroalkyl (meth)acrylate monomer.

25

35. A pressure-sensitive adhesive composition according to claim 34, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate, in a total amount of up to about 1.6% by weight, based on the total weight of the plurality of monomers.

30

36. A pressure-sensitive adhesive composition according to claim 35, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.

37. A pressure-sensitive adhesive composition comprising an emulsion copolymer formed from a plurality of monomers that includes, on a percent-by-weight basis, based on the total weight of monomers:

- (a) about 80% to 90% of a plurality of soft monomers, selected from the group consisting of alkyl acrylates having 4 to 12 carbon atoms in the alkyl group;
- (b) about 3% to 10% of at least one hard monomer, selected from the group consisting of styrene, methyl methacrylate, n-hexyl methacrylate, ethyl methacrylate, isobutyl methacrylate and n-butyl methacrylate;
- (c) about 3% to 8% of at least one acid monomer, selected from the group consisting of methacrylic acid, acrylic acid, itaconic acid and fumaric acid;
- (d) a positive amount up to about 1% of at least one alkylimidazolidone (meth)acrylate monomer; and
- (e) about 0.5% to 2.5% of at least one trifluoroalkyl (meth)acrylate monomer.

38. A pressure-sensitive adhesive composition according to claim 37, wherein the plurality of monomers further includes at least one aliphatic urethane di(meth)acrylate, in a total amount of up to about 1.6% by weight, based on the total weight of the plurality of monomers.

39. A pressure-sensitive adhesive composition according to claim 38, wherein the at least one aliphatic urethane di(meth)acrylate comprises an aliphatic urethane diacrylate having a molecular weight of about 5,000 g/mol.

40. A pressure-sensitive adhesive composition according to claim 37, wherein the plurality of soft monomers comprises:

- (a) 2-ethylhexyl acrylate, in a total amount of from about 10% to 22% by weight, based on the total weight of the plurality of monomers; and
- (b) butyl acrylate, in a total amount of from about 58% to 70% by weight, based on the total weight of the plurality of monomers.

41. A pressure-sensitive adhesive composition according to claim 37, wherein the at least one hard monomer comprises:

(a) methyl methacrylate, in a total amount of from about 3% to 8% by weight, based on the total weight of the plurality of monomers; and

(b) styrene, in a total amount of from about 1% to 5% by weight, based on the total weight of the plurality of monomers.

5

42. A pressure-sensitive adhesive composition according to claim 37, wherein the at least one acid monomer comprises:

(a) acrylic acid, in a total amount of from about 2% to 5% by weight, based on the total weight of the plurality of monomers; and

10 (b) methacrylic acid, in a total amount of from about 2% to 5% by weight, based on the total weight of the plurality of monomers.

43. A pressure-sensitive adhesive composition according to claim 37, further comprising a surfactant system comprising at least one surfactant.

15

44. A pressure-sensitive adhesive composition according to claim 43, wherein the surfactant system comprises at least one surfactant having an ethylene oxide content of about 30 moles ethylene oxide to 1 mole surfactant.

20

45. A pressure-sensitive adhesive composition according to claim 43, wherein the at least one surfactant comprises at least one anionic surfactant and at least one nonionic surfactant.

46. A pressure-sensitive adhesive composition according to claim 37, wherein the composition is crosslinked with at least one crosslinking agent.

25

47. An adhesive construction comprising a pressure-sensitive adhesive composition according to any one of claims 1, 10, 23, 34, or 37, coated on or laminated to a facestock.

48. An adhesive construction according to claim 47, wherein the facestock comprises  
30 a vinyl film.

=&gt; d his ful

(FILE 'HOME' ENTERED AT 13:50:34 ON 24 JAN 2006)

FILE 'HCAPLUS' ENTERED AT 14:35:27 ON 24 JAN 2006

L1 1 SEA ABB=ON PLU=ON US20050176876/PN  
D ALL  
SEL RN

FILE 'REGISTRY' ENTERED AT 14:35:45 ON 24 JAN 2006

L2 2 SEA ABB=ON PLU=ON (861509-70-8/BI OR 861509-72-0/BI)  
D SCAN

L3 1 SEA ABB=ON PLU=ON 861509-70-8/RN  
L4 1 SEA ABB=ON PLU=ON 861509-72-0/RN  
D SCAN  
D L2 1-2 CRN STR

L5 1 SEA ABB=ON PLU=ON IMIDAZOLE/CN  
D SCAN  
D RN

L6 900 SEA ABB=ON PLU=ON 288-32-4/CRN  
E POLYACRYLATIC/PCT  
E POLYACRYLIC/PCT

L7 317400 SEA ABB=ON PLU=ON POLYACRYLIC/PCT  
L8 14 SEA ABB=ON PLU=ON L7 AND L6  
D SCAN  
E 86261-90-7/CRN

L9 139 SEA ABB=ON PLU=ON 86261-90-7/CRN  
L10 130 SEA ABB=ON PLU=ON L7 AND L9  
L11 2 SEA ABB=ON PLU=ON L10 AND 1-100/F  
L12 2 SEA ABB=ON PLU=ON L11 AND L2  
L13 2 SEA ABB=ON PLU=ON L2 AND L7  
L14 24225 SEA ABB=ON PLU=ON L7 AND 1-100/F  
L15 154 SEA ABB=ON PLU=ON L14 AND IMIDAZOL?  
L16 12 SEA ABB=ON PLU=ON L14 AND IMIDAZOLID?  
L17 78 SEA ABB=ON PLU=ON L14 AND IMIDAZOLI?  
L18 71467 SEA ABB=ON PLU=ON PUR/PCT  
L19 268 SEA ABB=ON PLU=ON L18 AND L14  
L20 1 SEA ABB=ON PLU=ON L19 AND L15  
L21 154 SEA ABB=ON PLU=ON (L15 OR L16 OR L17)  
L22 1 SEA ABB=ON PLU=ON L2 AND L20  
L23 13537 SEA ABB=ON PLU=ON L7 AND L18  
L24 268 SEA ABB=ON PLU=ON L23 AND 1-100/F  
L25 83 SEA ABB=ON PLU=ON L24 AND TRIFLUORO?  
E PSTY/PCT

L26 118140 SEA ABB=ON PLU=ON PSTY/PCT  
L27 13 SEA ABB=ON PLU=ON L26 AND L24  
L28 3461 SEA ABB=ON PLU=ON L26 AND L14  
L29 0 SEA ABB=ON PLU=ON L25 AND (DIACRYL? OR DIMETHACRYL?  
OR DI(A) (ACRYL? OR METHACRYL?))

L30 1 SEA ABB=ON PLU=ON L25 AND IMIDAZOL?  
D SCAN

L31 1 SEA ABB=ON PLU=ON L2 AND L30  
L32 1 SEA ABB=ON PLU=ON L27 AND IMIDAZOL?  
L33 1 SEA ABB=ON PLU=ON L25 AND IMIDAZOL?  
L34 154 SEA ABB=ON PLU=ON L14 AND IMIDAZOL?  
L35 1 SEA ABB=ON PLU=ON L19 AND IMIDAZOL?  
L36 1 SEA ABB=ON PLU=ON L34 AND L18  
L37 8895 SEA ABB=ON PLU=ON L7 AND TRIFLUORO?  
L38 71861 SEA ABB=ON PLU=ON 100-42-5/CRN  
L39 18088 SEA ABB=ON PLU=ON 103-11-7/CRN  
D L9 CN

L40	1	SEA ABB=ON	PLU=ON	103-11-7/RN
		D SCAN		
L41	44855	SEA ABB=ON	PLU=ON	141-32-2/CRN
L42	71526	SEA ABB=ON	PLU=ON	80-62-6/CRN
L43	1	SEA ABB=ON	PLU=ON	HEXYL METHACRYLATE/CN
		D SCAN		
		D RN		
L44	785	SEA ABB=ON	PLU=ON	142-09-6/CRN
L45	1	SEA ABB=ON	PLU=ON	HEXYL ACRYLATE/CN
		D RN		
L46	485	SEA ABB=ON	PLU=ON	2499-95-8/CRN
L47	1	SEA ABB=ON	PLU=ON	ETHYL METHACRYLATE/CN
		D RN		
L48	5404	SEA ABB=ON	PLU=ON	97-63-2/CRN
L49	1	SEA ABB=ON	PLU=ON	ETHYL ACRYLATE/CN
		D RN		
L50	19903	SEA ABB=ON	PLU=ON	140-88-5/CRN
L51	1	SEA ABB=ON	PLU=ON	ISOBUTYL METHACRYLATE/CN
		D RN		
L52	4487	SEA ABB=ON	PLU=ON	97-86-9/CRN
		E ISOBUTYL ACRYLATE/CN		
L53	1	SEA ABB=ON	PLU=ON	ISOBUTYL ACRYLATE/CN
		D RN		
L54	1350	SEA ABB=ON	PLU=ON	106-63-8/CRN
L55	1	SEA ABB=ON	PLU=ON	N-BUTYL METHACRYLATE/CN
		D RN		
L56	20154	SEA ABB=ON	PLU=ON	97-88-1/CRN
L57	0	SEA ABB=ON	PLU=ON	N-BUTYL ACRYLATE/CN
L58	1	SEA ABB=ON	PLU=ON	BUTYL ACRYLATE/CN
		D RN		
L59	44855	SEA ABB=ON	PLU=ON	141-32-2/CRN
		E METHYL ACRYLATE/CN		
L60	1	SEA ABB=ON	PLU=ON	METHYL ACRYLATE/CN
		D RN		
L61	12432	SEA ABB=ON	PLU=ON	96-33-3/CRN
		D SCAN L60		
		D CN		
L62	1	SEA ABB=ON	PLU=ON	METHACRYLIC ACID/CN
		D RN		
L63	45073	SEA ABB=ON	PLU=ON	79-41-4/CRN
L64	1	SEA ABB=ON	PLU=ON	ACRYLIC ACID/CN
		D RN		
L65	58387	SEA ABB=ON	PLU=ON	79-10-7/CRN
L66	1	SEA ABB=ON	PLU=ON	ITACONIC ACID/CN
		D RN		
L67	5544	SEA ABB=ON	PLU=ON	97-65-4/CRN
		E FUMARIC ACID/CN		
L68	1	SEA ABB=ON	PLU=ON	FUMARIC ACID/CN
		D RN		
L69	33624	SEA ABB=ON	PLU=ON	110-17-8/CRN
		E URETHANE DIMETHACRYLATE/CN		
L70	1	SEA ABB=ON	PLU=ON	URETHANE DIMETHACRYLATE/CN
		D RN		
L71	175	SEA ABB=ON	PLU=ON	72869-86-4/CRN
		E URETHANE DIACRYLATE/CN		
		D CN		
		D SCAN L70		
		E URETHANE DIACRYLIC ACID/CN		
		D SCAN L70		
		E 2-PROPENOIC ACID, URETHANE ESTER/CN		
		E METHYL ACRYLATE/CN		
L72	1	SEA ABB=ON	PLU=ON	METHYL ACRYLATE/CN

D RN  
 E TRIFLUOROETHYL METHACRYLATE/CN  
 L73 1 SEA ABB=ON PLU=ON TRIFLUOROETHYL METHACRYLATE/CN  
 D SCAN  
 D RN  
 L74 171 SEA ABB=ON PLU=ON 38785-10-3/CRN  
 E TRIFLUOROETHYL ACRYLATE/CN  
 E 352-87-4/RN  
 L75 1 SEA ABB=ON PLU=ON 352-87-4/RN  
 D SCAN  
 L76 1 SEA ABB=ON PLU=ON 38785-10-3/RN  
 D SCAN  
 L77 1085 SEA ABB=ON PLU=ON 352-87-4/CRN  
 D SCAN L75  
 E C5H5F3O2/MF  
 L78 57 SEA ABB=ON PLU=ON C5H5F3O2/MF  
 L79 4 SEA ABB=ON PLU=ON L78 AND ACRYLATE  
 D SCAN  
 L80 1 SEA ABB=ON PLU=ON L79 AND TRIFLUOROETHYL  
 D SCAN  
 D RN  
 L81 291 SEA ABB=ON PLU=ON 407-47-6/CRN  
 D L9 CN  
 E ETHYLIMIDAZOLIDONE ACRYLATE/CN  
 E 86261-90-7/RN  
 L82 1 SEA ABB=ON PLU=ON 86261-90-7/RN  
 D SCAN  
 E C8H12 N2O3/MF  
 E C8H12N2O3/MF  
 L83 892 SEA ABB=ON PLU=ON C8H12N2O3/MF  
 L84 9 SEA ABB=ON PLU=ON L83 AND ACRYL?  
 L85 1 SEA ABB=ON PLU=ON L84 AND IMIDAZOL?  
 D SCAN  
 D RN  
 L86 2 SEA ABB=ON PLU=ON 86241-34-1/CRN  
 D SCAN  
 L87 0 SEA ABB=ON PLU=ON L86 AND L2

FILE 'HCAPLUS' ENTERED AT 16:22:01 ON 24 JAN 2006

E ADHESIVE/CT  
 E E4+ALL  
 L88 13839 SEA ABB=ON PLU=ON ADHESI? (2A) PRESSUR?  
 L89 11 SEA ABB=ON PLU=ON ALKYLIMIDAZOL? (3A) ?ACRYL?  
 L90 1 SEA ABB=ON PLU=ON L88 AND L89  
 D SCAN  
 D SCAN L1  
 D QUE L25  
 L91 4283 SEA ABB=ON PLU=ON L37

FILE 'REGISTRY' ENTERED AT 16:30:49 ON 24 JAN 2006

L92 8895 SEA ABB=ON PLU=ON L14 AND TRIFLUORO?

FILE 'HCAPLUS' ENTERED AT 16:31:40 ON 24 JAN 2006

L93 4283 SEA ABB=ON PLU=ON L92  
 L94 8 SEA ABB=ON PLU=ON ALKYL? (2A) IMIDAZOL? (A) ?ACRYL?  
 L95 21 SEA ABB=ON PLU=ON ALKYL? (2A) IMIDAZOL? (2A) ?ACRYL?  
 L96 30 SEA ABB=ON PLU=ON L95 OR L94 OR L89  
 L97 1 SEA ABB=ON PLU=ON L96 AND L88  
 D SCAN  
 D QUE STAT L93  
 L98 1 SEA ABB=ON PLU=ON L93 AND L96  
 D SCAN

L99 1 SEA ABB=ON PLU=ON L98 AND L88  
D SCAN

FILE 'REGISTRY' ENTERED AT 16:38:05 ON 24 JAN 2006

L100 61529 SEA ABB=ON PLU=ON L7 AND ACRYLAT?  
L101 41691 SEA ABB=ON PLU=ON L7 AND METHACRYLAT?

FILE 'HCAPLUS' ENTERED AT 16:39:09 ON 24 JAN 2006

L102 250165 SEA ABB=ON PLU=ON L100  
L103 185289 SEA ABB=ON PLU=ON L101  
L104 7010 SEA ABB=ON PLU=ON L100/RCT  
L105 5375 SEA ABB=ON PLU=ON L101/RCT  
L106 38020 SEA ABB=ON PLU=ON L104 OR L105 OR ?ACRYLAT? (2A) (MONOMER?  
ER? OR REACT? OR REAGENT?)  
D QUE L92

L107 4794 SEA ABB=ON PLU=ON L93 OR TRIFLUORO? (2A) ?ACRYLAT?  
L108 520 SEA ABB=ON PLU=ON L107 AND L106  
L109 1 SEA ABB=ON PLU=ON L96 AND L108  
D SCAN  
D QUE STAT

L110 8 SEA ABB=ON PLU=ON L88 AND L107  
L111 560 SEA ABB=ON PLU=ON L88 AND L106  
L112 1 SEA ABB=ON PLU=ON L111 AND (L107 OR L96)  
D QUE L91

L113 4794 SEA ABB=ON PLU=ON L91 OR L107  
D QUE L111

L114 1 SEA ABB=ON PLU=ON L111 AND (L113 OR L96)  
L115 527 SEA ABB=ON PLU=ON L106 AND (L113 OR L96)  
D QUE L103

L116 409093 SEA ABB=ON PLU=ON L102 OR L103 OR ?ACRYLAT?  
D QUE L113

L117 1 SEA ABB=ON PLU=ON L113 AND L116 AND L96  
D SCAN

L118 1 SEA ABB=ON PLU=ON L90 OR (L97 OR L98 OR L99)  
L119 8 SEA ABB=ON PLU=ON L118 OR L109 OR L110 OR L112 OR  
L114 OR L117 OR L118

L120 1 SEA ABB=ON PLU=ON L119 AND L1  
L121 8 SEA ABB=ON PLU=ON L120 OR L119  
L122 148 SEA ABB=ON PLU=ON L71  
L123 619 SEA ABB=ON PLU=ON L122 OR (URETHAN? (A) ((DIMETHACRYLAT  
? OR DIACRYLAT?) OR DI (A) ?ACRYLAT?))

L124 4 SEA ABB=ON PLU=ON L123 AND L88  
L125 0 SEA ABB=ON PLU=ON L123 AND L96  
L126 6 SEA ABB=ON PLU=ON L123 AND L113  
L127 18 SEA ABB=ON PLU=ON L121 OR L124 OR L126  
L128 66 SEA ABB=ON PLU=ON L9  
L129 74 SEA ABB=ON PLU=ON L128 OR (ETHYLIMIDAZOLID? OR  
ETHYL (A) IMIDAZOLID?) (A) ?ACRYLAT?

L130 9 SEA ABB=ON PLU=ON L129 AND L88  
L131 1 SEA ABB=ON PLU=ON L130 AND L107  
L132 1 SEA ABB=ON PLU=ON L130 AND L106  
D SCAN  
D QUE

L133 70 SEA ABB=ON PLU=ON L129 AND L116  
L134 9 SEA ABB=ON PLU=ON L133 AND L88  
L135 4 SEA ABB=ON PLU=ON L133 AND L96  
L136 1 SEA ABB=ON PLU=ON L133 AND L107  
L137 13 SEA ABB=ON PLU=ON L133 AND L106  
L138 39 SEA ABB=ON PLU=ON L127 OR L130 OR L132 OR (L134 OR  
L135 OR L136 OR L137)

L139 256 SEA ABB=ON PLU=ON SOFT? (2A) MONOMER?  
L140 621 SEA ABB=ON PLU=ON HARD? (2A) MONOMER?

L141 11418 SEA ABB=ON PLU=ON ACID(2A)MONOMER?  
 L142 16 SEA ABB=ON PLU=ON L139 AND L140 AND L141  
 D SCAN TI  
 L143 2 SEA ABB=ON PLU=ON L142 AND L88  
 D SCAN  
 L144 5 SEA ABB=ON PLU=ON L142 AND ADHESI?  
 D SCAN TI  
 L145 40 SEA ABB=ON PLU=ON L143 OR L138  
 L146 1 SEA ABB=ON PLU=ON L142 AND L107  
 D SCAN  
 L147 40 SEA ABB=ON PLU=ON L145 OR L146  
 D QUE L129

FILE 'REGISTRY' ENTERED AT 17:20:21 ON 24 JAN 2006

FILE 'HCAPLUS' ENTERED AT 17:20:38 ON 24 JAN 2006

D QUE STAT L59

L148 8122 SEA ABB=ON PLU=ON L48  
 L149 34091 SEA ABB=ON PLU=ON L50  
 L150 54607 SEA ABB=ON PLU=ON L148 OR L149 OR ETHYL(A)?ACRYLAT?  
 L151 23193 SEA ABB=ON PLU=ON L56  
 L152 82607 SEA ABB=ON PLU=ON L149 OR L151 OR BUTYL(A)?ACRYLAT?  
 L153 99065 SEA ABB=ON PLU=ON L150 OR L152  
 L154 99246 SEA ABB=ON PLU=ON L153 OR L139 OR SOFT(A)MONOMER  
 L155 370456 SEA ABB=ON PLU=ON L38 OR STYRENE  
 L156 143546 SEA ABB=ON PLU=ON L42  
 L157 25769 SEA ABB=ON PLU=ON L61  
 L158 195895 SEA ABB=ON PLU=ON L156 OR L157 OR METHYL(A)?ACRYLAT?  
  
 L159 1118 SEA ABB=ON PLU=ON L44  
 L160 451 SEA ABB=ON PLU=ON L46  
 L161 2260 SEA ABB=ON PLU=ON L159 OR L160 OR HEXYL(A)?ACRYLAT?  
 L162 8122 SEA ABB=ON PLU=ON L48  
 L163 34091 SEA ABB=ON PLU=ON L50  
 L164 54607 SEA ABB=ON PLU=ON L162 OR L163 OR ETHYL(A)?ACRYLAT?  
 L165 4403 SEA ABB=ON PLU=ON L52  
 L166 1734 SEA ABB=ON PLU=ON L54  
 L167 6886 SEA ABB=ON PLU=ON L165 OR L166 OR ISOBUTYL(A)?ACRYLAT?  
 ? OR (ISO OR I) (2A) BUTYL(2A)?ACRYLAT?  
 L168 3308 SEA ABB=ON PLU=ON L55  
 L169 52275 SEA ABB=ON PLU=ON L59  
 L170 69113 SEA ABB=ON PLU=ON L168 OR L169 OR BUTYL(A)?ACRYLAT?  
 L171 QUE ABB=ON PLU=ON HARD(A)MONOMER OR L140 OR L158 OR  
 L155 OR L161 OR L164 OR L167  
 L172 63096 SEA ABB=ON PLU=ON L63  
 L173 95226 SEA ABB=ON PLU=ON L65  
 L174 203151 SEA ABB=ON PLU=ON L172 OR L173 OR (ACRYLIC OR  
 METHACRYLIC) (A)ACID  
 L175 10071 SEA ABB=ON PLU=ON L67 OR ITACONIC(A)ACID  
 L176 15791 SEA ABB=ON PLU=ON L69 OR FUMERIC(A)ACID  
 L177 QUE ABB=ON PLU=ON ACID(A)MONOMER OR L174 OR L175 OR  
 L176  
 L178 40001 SEA ABB=ON PLU=ON L154 AND L171 AND L177  
 L179 39289 SEA ABB=ON PLU=ON L178 AND L174  
 L180 1162 SEA ABB=ON PLU=ON L178 AND L88  
 L181 57950 SEA ABB=ON PLU=ON SOFT(A)MONOMER OR L148 OR L149 OR  
 L151 OR L139  
 L182 279837 SEA ABB=ON PLU=ON L38  
 L183 200685 SEA ABB=ON PLU=ON HARD(A)MONOMER OR L140 OR L156 OR  
 L157 OR L159 OR L160 OR L162 OR L163 OR L165 OR L166  
 OR L168 OR L169  
 L184 26124 SEA ABB=ON PLU=ON L181 AND L183 AND L177

L185 738 SEA ABB=ON PLU=ON L184 AND L88  
 L186 52275 SEA ABB=ON PLU=ON L59  
 L187 58657 SEA ABB=ON PLU=ON SOFT(A)MONOMER OR L148 OR L186  
 L188 279837 SEA ABB=ON PLU=ON L38  
 L189 151073 SEA ABB=ON PLU=ON HARD(A)MONOMER OR L140 OR L156 OR  
 L159 OR L162 OR L165 OR L168  
 L190 18150 SEA ABB=ON PLU=ON L187 AND L189 AND L177  
 L191 634 SEA ABB=ON PLU=ON L190 AND L88  
 L192 12917 SEA ABB=ON PLU=ON L88(2A)SENSITIV?  
 L193 630 SEA ABB=ON PLU=ON L192 AND L191  
 L194 223747 SEA ABB=ON PLU=ON SURFACTANT?  
 L195 68 SEA ABB=ON PLU=ON L194 AND L193  
 L196 405 SEA ABB=ON PLU=ON (CROSSLINK OR CROSS(A)LINK) (2A)AGEN  
 T?  
 L197 0 SEA ABB=ON PLU=ON L195 AND L196  
 L198 1 SEA ABB=ON PLU=ON L196 AND L193  
 D SCAN  
 L199 287923 SEA ABB=ON PLU=ON CROSSLINK? OR CROSS(A)LINK?  
 L200 0 SEA ABB=ON PLU=ON L199 AND L96  
 L201 1 SEA ABB=ON PLU=ON L196 AND L193  
 L202 198 SEA ABB=ON PLU=ON L199 AND L193  
 L203 13 SEA ABB=ON PLU=ON L202 AND L194  
 D SCAN  
 D SCAN TI  
 L204 2710 SEA ABB=ON PLU=ON L178 AND L194  
 L205 1 SEA ABB=ON PLU=ON L204 AND L196  
 L206 54 SEA ABB=ON PLU=ON L147 OR L198 OR L201 OR L203 OR  
 L205  
 L207 13 SEA ABB=ON PLU=ON L195 AND L199  
 L208 54 SEA ABB=ON PLU=ON L207 OR L206  
 L209 17891 SEA ABB=ON PLU=ON L39  
 L210 279837 SEA ABB=ON PLU=ON L38  
 L211 132 SEA ABB=ON PLU=ON L74

FILE 'REGISTRY' ENTERED AT 18:37:57 ON 24 JAN 2006

E MATRIFE/CN  
 E NORSOCRYL/CN  
 L212 1 SEA ABB=ON PLU=ON NORSOCRYL/CN  
 D CRN  
 D RN  
 L213 1 SEA ABB=ON PLU=ON 132893-93-7/RN

FILE 'HCAPLUS' ENTERED AT 18:39:09 ON 24 JAN 2006

L214 135 SEA ABB=ON PLU=ON L211 OR TRIFLUOROETHYL(A)METHACRYLA  
 T? OR TRI(2A)FLUORO(2A)METHACRYLAT? OR MATRIFE  
 D QUE L129  
 L215 4 SEA ABB=ON PLU=ON L212 OR L213  
 L216 118 SEA ABB=ON PLU=ON L129 OR L96 OR L215 OR NORSOCRYL  
 L217 1 SEA ABB=ON PLU=ON L209 AND L169 AND L156 AND L155  
 AND L172 AND L135 AND L173  
 D SCAN

FILE 'REGISTRY' ENTERED AT 18:46:06 ON 24 JAN 2006

FILE 'HCAPLUS' ENTERED AT 18:52:31 ON 24 JAN 2006

L218 34091 SEA ABB=ON PLU=ON L50  
 D QUE  
 L219 143546 SEA ABB=ON PLU=ON L42  
 L220 17891 SEA ABB=ON PLU=ON L39  
 L221 3 SEA ABB=ON PLU=ON L220 AND L169 AND L219 AND L182  
 AND L172 AND L173 AND L216  
 D SCAN

## D SCAN TI

FILE 'REGISTRY' ENTERED AT 19:05:10 ON 24 JAN 2006

L222 3 SEA ABB=ON PLU=ON L39 AND L59 AND L42 AND L38 AND  
L63 AND L65 AND L9

FILE 'HCAPLUS' ENTERED AT 19:07:18 ON 24 JAN 2006

L223 2 SEA ABB=ON PLU=ON L222  
D SCAN TI  
L224 1 SEA ABB=ON PLU=ON L3  
L225 1 SEA ABB=ON PLU=ON L4  
L226 2 SEA ABB=ON PLU=ON (L223 OR L224 OR L225)  
L227 59 SEA ABB=ON PLU=ON L208 OR L215 OR L217 OR L221 OR  
L226  
L228 1 SEA ABB=ON PLU=ON L1 AND L227

=&gt; =&gt; d que stat l227

L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050176876/PN  
L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON 861509-70-8/RN  
L4 1 SEA FILE=REGISTRY ABB=ON PLU=ON 861509-72-0/RN  
L7 317400 SEA FILE=REGISTRY ABB=ON PLU=ON POLYACRYLIC/PCT  
L9 139 SEA FILE=REGISTRY ABB=ON PLU=ON 86261-90-7/CRN  
L14 24225 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND 1-100/F  
L37 8895 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND TRIFLUORO?  
L38 71861 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/CRN  
L39 18088 SEA FILE=REGISTRY ABB=ON PLU=ON 103-11-7/CRN  
L42 71526 SEA FILE=REGISTRY ABB=ON PLU=ON 80-62-6/CRN  
L44 785 SEA FILE=REGISTRY ABB=ON PLU=ON 142-09-6/CRN  
L46 485 SEA FILE=REGISTRY ABB=ON PLU=ON 2499-95-8/CRN  
L48 5404 SEA FILE=REGISTRY ABB=ON PLU=ON 97-63-2/CRN  
L50 19903 SEA FILE=REGISTRY ABB=ON PLU=ON 140-88-5/CRN  
L52 4487 SEA FILE=REGISTRY ABB=ON PLU=ON 97-86-9/CRN  
L54 1350 SEA FILE=REGISTRY ABB=ON PLU=ON 106-63-8/CRN  
L55 1 SEA FILE=REGISTRY ABB=ON PLU=ON N-BUTYL METHACRYLATE/  
CN  
L56 20154 SEA FILE=REGISTRY ABB=ON PLU=ON 97-88-1/CRN  
L59 44855 SEA FILE=REGISTRY ABB=ON PLU=ON 141-32-2/CRN  
L61 12432 SEA FILE=REGISTRY ABB=ON PLU=ON 96-33-3/CRN  
L63 45073 SEA FILE=REGISTRY ABB=ON PLU=ON 79-41-4/CRN  
L65 58387 SEA FILE=REGISTRY ABB=ON PLU=ON 79-10-7/CRN  
L67 5544 SEA FILE=REGISTRY ABB=ON PLU=ON 97-65-4/CRN  
L69 33624 SEA FILE=REGISTRY ABB=ON PLU=ON 110-17-8/CRN  
L71 175 SEA FILE=REGISTRY ABB=ON PLU=ON 72869-86-4/CRN  
L88 13839 SEA FILE=HCAPLUS ABB=ON PLU=ON ADHESI? (2A) PRESSUR?  
L89 11 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKYLIMIDAZOL? (3A) ?ACR  
YL?  
L90 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L88 AND L89  
L91 4283 SEA FILE=HCAPLUS ABB=ON PLU=ON L37  
L92 8895 SEA FILE=REGISTRY ABB=ON PLU=ON L14 AND TRIFLUORO?  
L93 4283 SEA FILE=HCAPLUS ABB=ON PLU=ON L92  
L94 8 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKYL? (2A) IMIDAZOL? (A)  
?ACRYL?  
L95 21 SEA FILE=HCAPLUS ABB=ON PLU=ON ALKYL? (2A) IMIDAZOL? (2A)  
)?ACRYL?  
L96 30 SEA FILE=HCAPLUS ABB=ON PLU=ON L95 OR L94 OR L89  
L97 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 AND L88  
L98 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L93 AND L96  
L99 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L98 AND L88  
L100 61529 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND ACRYLAT?  
L101 41691 SEA FILE=REGISTRY ABB=ON PLU=ON L7 AND METHACRYLAT?

L102 250165 SEA FILE=HCAPLUS ABB=ON PLU=ON L100  
 L103 185289 SEA FILE=HCAPLUS ABB=ON PLU=ON L101  
 L104 7010 SEA FILE=HCAPLUS ABB=ON PLU=ON L100/RCT  
 L105 5375 SEA FILE=HCAPLUS ABB=ON PLU=ON L101/RCT  
 L106 38020 SEA FILE=HCAPLUS ABB=ON PLU=ON L104 OR L105 OR  
 ?ACRYLAT? (2A) (MONOMER? OR REACT? OR REAGENT?)  
 L107 4794 SEA FILE=HCAPLUS ABB=ON PLU=ON L93 OR TRIFLUORO? (2A) ?  
 ACRYLAT?  
 L110 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L88 AND L107  
 L111 560 SEA FILE=HCAPLUS ABB=ON PLU=ON L88 AND L106  
 L112 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L111 AND (L107 OR  
 L96)  
 L113 4794 SEA FILE=HCAPLUS ABB=ON PLU=ON L91 OR L107  
 L114 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L111 AND (L113 OR  
 L96)  
 L116 409093 SEA FILE=HCAPLUS ABB=ON PLU=ON L102 OR L103 OR  
 ?ACRYLAT?  
 L117 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND L116 AND L96  
 L118 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 OR (L97 OR L98 OR  
 L99)  
 L119 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L118 OR L1109 OR L110  
 OR L112 OR L114 OR L117 OR L118  
 L120 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L119 AND L1  
 L121 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L120 OR L119  
 L122 148 SEA FILE=HCAPLUS ABB=ON PLU=ON L71  
 L123 619 SEA FILE=HCAPLUS ABB=ON PLU=ON L122 OR (URETHAN? (A) ((  
 DIMETHACRYLAT? OR DIACRYLAT?) OR DI (A) ?ACRYLAT?))  
 L124 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L123 AND L88  
 L126 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L123 AND L113  
 L127 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L121 OR L124 OR L126  
 L128 66 SEA FILE=HCAPLUS ABB=ON PLU=ON L9  
 L129 74 SEA FILE=HCAPLUS ABB=ON PLU=ON L128 OR (ETHYLIMIDAZOL  
 ID? OR ETHYL (A) IMIDAZOLID?) (A) ?ACRYLAT?  
 L130 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L129 AND L88  
 L132 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L130 AND L106  
 L133 70 SEA FILE=HCAPLUS ABB=ON PLU=ON L129 AND L116  
 L134 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L133 AND L88  
 L135 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L133 AND L96  
 L136 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L133 AND L107  
 L137 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L133 AND L106  
 L138 39 SEA FILE=HCAPLUS ABB=ON PLU=ON L127 OR L130 OR L132  
 OR (L134 OR L135 OR L136 OR L137)  
 L139 256 SEA FILE=HCAPLUS ABB=ON PLU=ON SOFT? (2A) MONOMER?  
 L140 621 SEA FILE=HCAPLUS ABB=ON PLU=ON HARD? (2A) MONOMER?  
 L141 11418 SEA FILE=HCAPLUS ABB=ON PLU=ON ACID (2A) MONOMER?  
 L142 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L139 AND L140 AND  
 L141  
 L143 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L142 AND L88  
 L145 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L143 OR L138  
 L146 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L142 AND L107  
 L147 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L145 OR L146  
 L148 8122 SEA FILE=HCAPLUS ABB=ON PLU=ON L48  
 L149 34091 SEA FILE=HCAPLUS ABB=ON PLU=ON L50  
 L150 54607 SEA FILE=HCAPLUS ABB=ON PLU=ON L148 OR L149 OR  
 ETHYL (A) ?ACRYLAT?  
 L151 23193 SEA FILE=HCAPLUS ABB=ON PLU=ON L56  
 L152 82607 SEA FILE=HCAPLUS ABB=ON PLU=ON L149 OR L151 OR  
 BUTYL (A) ?ACRYLAT?  
 L153 99065 SEA FILE=HCAPLUS ABB=ON PLU=ON L150 OR L152  
 L154 99246 SEA FILE=HCAPLUS ABB=ON PLU=ON L153 OR L139 OR  
 SOFT (A) MONOMER

L155 370456 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 OR STYRENE  
 L156 143546 SEA FILE=HCAPLUS ABB=ON PLU=ON L42  
 L157 25769 SEA FILE=HCAPLUS ABB=ON PLU=ON L61  
 L158 195895 SEA FILE=HCAPLUS ABB=ON PLU=ON L156 OR L157 OR  
 METHYL(A)?ACRYLAT?  
 L159 1118 SEA FILE=HCAPLUS ABB=ON PLU=ON L44  
 L160 451 SEA FILE=HCAPLUS ABB=ON PLU=ON L46  
 L161 2260 SEA FILE=HCAPLUS ABB=ON PLU=ON L159 OR L160 OR  
 HEXYL(A)?ACRYLAT?  
 L162 8122 SEA FILE=HCAPLUS ABB=ON PLU=ON L48  
 L163 34091 SEA FILE=HCAPLUS ABB=ON PLU=ON L50  
 L164 54607 SEA FILE=HCAPLUS ABB=ON PLU=ON L162 OR L163 OR  
 ETHYL(A)?ACRYLAT?  
 L165 4403 SEA FILE=HCAPLUS ABB=ON PLU=ON L52  
 L166 1734 SEA FILE=HCAPLUS ABB=ON PLU=ON L54  
 L167 6886 SEA FILE=HCAPLUS ABB=ON PLU=ON L165 OR L166 OR  
 ISOBUTYL(A)?ACRYLAT? OR (ISO OR I)(2A)BUTYL(2A)?ACRYLAT  
 ?  
 L168 3308 SEA FILE=HCAPLUS ABB=ON PLU=ON L55  
 L169 52275 SEA FILE=HCAPLUS ABB=ON PLU=ON L59  
 L171 QUE ABB=ON PLU=ON HARD(A)MONOMER OR L140 OR L158 OR  
 L155 OR L161 OR L164 OR L167  
 L172 63096 SEA FILE=HCAPLUS ABB=ON PLU=ON L63  
 L173 95226 SEA FILE=HCAPLUS ABB=ON PLU=ON L65  
 L174 203151 SEA FILE=HCAPLUS ABB=ON PLU=ON L172 OR L173 OR  
 (ACRYLIC OR METHACRYLIC)(A)ACID  
 L175 10071 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 OR ITACONIC(A)ACID  
 L176 15791 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 OR FUMERIC(A)ACID  
 L177 QUE ABB=ON PLU=ON ACID(A)MONOMER OR L174 OR L175 OR  
 L176  
 L178 40001 SEA FILE=HCAPLUS ABB=ON PLU=ON L154 AND L171 AND  
 L177  
 L182 279837 SEA FILE=HCAPLUS ABB=ON PLU=ON L38  
 L186 52275 SEA FILE=HCAPLUS ABB=ON PLU=ON L59  
 L187 58657 SEA FILE=HCAPLUS ABB=ON PLU=ON SOFT(A)MONOMER OR  
 L148 OR L186  
 L189 151073 SEA FILE=HCAPLUS ABB=ON PLU=ON HARD(A)MONOMER OR  
 L140 OR L156 OR L159 OR L162 OR L165 OR L168  
 L190 18150 SEA FILE=HCAPLUS ABB=ON PLU=ON L187 AND L189 AND  
 L177  
 L191 634 SEA FILE=HCAPLUS ABB=ON PLU=ON L190 AND L88  
 L192 12917 SEA FILE=HCAPLUS ABB=ON PLU=ON L88(2A)SENSITIV?  
 L193 630 SEA FILE=HCAPLUS ABB=ON PLU=ON L192 AND L191  
 L194 223747 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACTANT?  
 L195 68 SEA FILE=HCAPLUS ABB=ON PLU=ON L194 AND L193  
 L196 405 SEA FILE=HCAPLUS ABB=ON PLU=ON (CROSSLINK OR  
 CROSS(A)LINK)(2A)AGENT?  
 L198 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L196 AND L193  
 L199 287923 SEA FILE=HCAPLUS ABB=ON PLU=ON CROSSLINK? OR  
 CROSS(A)LINK?  
 L201 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L196 AND L193  
 L202 198 SEA FILE=HCAPLUS ABB=ON PLU=ON L199 AND L193  
 L203 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L202 AND L194  
 L204 2710 SEA FILE=HCAPLUS ABB=ON PLU=ON L178 AND L194  
 L205 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L204 AND L196  
 L206 54 SEA FILE=HCAPLUS ABB=ON PLU=ON L147 OR L198 OR L201  
 OR L203 OR L205  
 L207 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L195 AND L199  
 L208 54 SEA FILE=HCAPLUS ABB=ON PLU=ON L207 OR L206  
 L209 17891 SEA FILE=HCAPLUS ABB=ON PLU=ON L39

L212 1 SEA FILE=REGISTRY ABB=ON PLU=ON NORSOCRYL/CN  
 L213 1 SEA FILE=REGISTRY ABB=ON PLU=ON 132893-93-7/RN  
 L215 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L212 OR L213  
 L216 118 SEA FILE=HCAPLUS ABB=ON PLU=ON L129 OR L96 OR L215  
 OR NORSOCRYL  
 L217 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L209 AND L169 AND  
 L156 AND L155 AND L172 AND L135 AND L173  
 L219 143546 SEA FILE=HCAPLUS ABB=ON PLU=ON L42  
 L220 17891 SEA FILE=HCAPLUS ABB=ON PLU=ON L39  
 L221 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L220 AND L169 AND  
 L219 AND L182 AND L172 AND L173 AND L216  
 L222 3 SEA FILE=REGISTRY ABB=ON PLU=ON L39 AND L59 AND L42  
 AND L38 AND L63 AND L65 AND L9  
 L223 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L222  
 L224 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3  
 L225 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L4  
 L226 2 SEA FILE=HCAPLUS ABB=ON PLU=ON (L223 OR L224 OR  
 L225)  
 L227 59 SEA FILE=HCAPLUS ABB=ON PLU=ON L208 OR L215 OR L217  
 OR L221 OR L226

=> d 1227 1-59 ibib abs hitstr hitind

L227 ANSWER 1 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:1351061 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 144:71207  
 TITLE: Single-component system based on coreactive  
 latex, preparation process, and application in  
 the field of formaldehyde-free coatings  
 INVENTOR(S): Verge, Christophe; Cochet, Francoise; Klein,  
 Sophie  
 PATENT ASSIGNEE(S): Arkema, Fr.  
 SOURCE: Fr. Demande, 31 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	
FR 2872167	A1	20051230	FR 2004-6996	2004 0625
PRIORITY APPLN. INFO.:			FR 2004-6996	2004 0625

AB Single-component curable latex coating compns. with good storage  
 stability contain a polymer prepared from  $\geq 1$  ethylenically  
 unsatd. monomers having  $R_1NC(X)NH$  groups ( $R_1$  = radically  
 polymerizable group,  $X = O$  or  $S$ ) (I) and a polymer prepared from  
 $\geq 1$  ethylenically unsatd. monomer having  $R_1NC(X)N$  groups ( $R_1$   
 = radically polymerizable group,  $X = O$  or  $S$ ) similar to or  
 different than I and a functional group selected from acetal,  
 mercaptal, mercaptol, dioxolane, and dithiolane. A typical  
 coating composition was prep'd by mixing an emulsion prepared by radical  
 polymerization of Me **methacrylate** (II) 42, Bu **acrylate**  
 (III) 46, acrylamidomethylpropanesulfonic acid 2, and Norsocryl  
 104 (imidazolidonylethyl **methacrylate**) (IV) 10 parts

with an emulsion prepared by radical polymerization of II 43, III 46, acrylic acid 1, and IV 10 parts in the presence of Highlink DM (2,2-dimethoxyacetaldehyde) which reacted with IV during polymerization

IT 871916-37-9P, 2-Acrylamido-2-methylpropanesulfonic acid-butyl acrylate-Norsocryl 104-methyl methacrylate copolymer 871916-39-1DP, Acrylic acid-butyl acrylate-Norsocryl 104-methyl methacrylate copolymer, reaction products with dimethoxyacetaldehyde

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

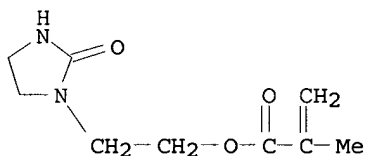
(storage-stable, single-component system based on coreactive latexes for formaldehyde-free curable coatings)

RN 871916-37-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

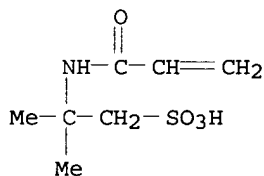
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



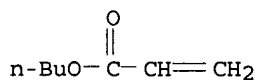
CM 2

CRN 15214-89-8  
CMF C7 H13 N O4 S

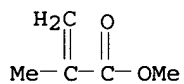


CM 3

CRN 141-32-2  
CMF C7 H12 O2

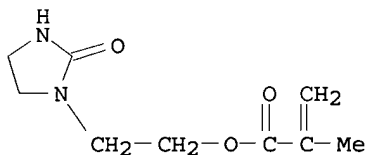


CM 4

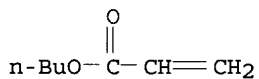
CRN 80-62-6  
CMF C5 H8 O2

RN 871916-39-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-  
 propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

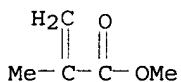
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3

CM 2

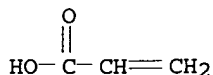
CRN 141-32-2  
CMF C7 H12 O2

CM 3

CRN 80-62-6  
CMF C5 H8 O2

CM 4

CRN 79-10-7  
CMF C3 H4 O2



IC ICM C08L033-14  
ICS C08L033-24; C08J003-26; C09D005-00; D21H017-38; D21H019-44;  
D06N003-04

CC 42-10 (Coatings, Inks, and Related Products)

ST single component curable latex coating ureido polymer;  
dimethoxyacetaldehyde adduct imidazolidonylethyl  
**methacrylate** copolymer single component curable coating;  
imidazolidonylethyl **methacrylate** copolymer single  
component curable latex coating; dithiolane polymer single  
component curable latex coating; dioxolane polymer single  
component curable latex coating; mercaptol polymer single  
component curable latex coating; mercaptal polymer single  
component curable latex coating; acetal polymer single component  
curable latex coating

IT 51673-84-8DP, Highlink DM, reaction products with acrylic acid-Bu  
**acrylate**-imidazolidonylethyl **methacrylate**-Me  
**methacrylate** copolymer **871916-37-9P**,  
2-Acrylamido-2-methylpropanesulfonic acid-butyl **acrylate**  
-Norsocryl 104-methyl **methacrylate** copolymer  
**871916-39-1DP**, Acrylic acid-butyl **acrylate**  
-Norsocryl 104-methyl **methacrylate** copolymer,  
reaction products with dimethoxyacetaldehyde  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(storage-stable, single-component system based on coreactive  
latexes for formaldehyde-free curable coatings)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 2 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1173907 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 143:430062

TITLE: Printing plate precursor comprising  
solvent-resistant copolymer

INVENTOR(S): Kitson, Anthony P.; Ray, Kevin B.; Ray,  
Joanne; Jarek, Mathias; Savariar-Hauck, Celin

PATENT ASSIGNEE(S): Kodak Polychrome Graphics LLC, USA

SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part  
of U.S. Ser. No. 681,701.  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
US 2005244749	A1	20051103	US 2005-130797	2005 0517
US 2005079432	A1	20050414	US 2003-681701	2003 1008
US 6893783	B2	20050517		

JP 2005115388 A2 20050428 JP 2004-295160

2004  
1007

PRIORITY APPLN. INFO.:

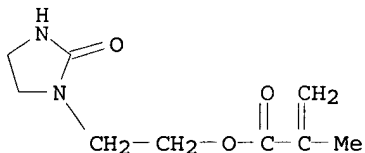
US 2003-681701

A2

2003  
1008

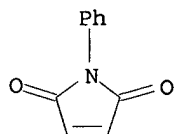
- AB A pos.-working, thermally imageable element generally comprising a multi-layered imageable coating. The invention provides an imageable element comprising a substrate, an ink-receptive top layer, and an underlayer, the underlayer including a specific copolymer described herein. The copolymer can be a polymer comprising constitutional units derived from: (a) a monomer having a cyclic urea group; (b) a monomer comprising an N-substituted maleimide; (c) a (meth)acrylamide or (meth)acrylate monomer; and (d) a (meth)acrylic acid or vinyl HOBz monomer. Optionally, the copolymer can be a polymer comprising constitutional units derived from: (a) a monomer having a cyclic urea group; (b) a (meth)acrylic acid or vinyl HOBz monomer; (c) and a (meth)acrylonitrile monomer. The imageable element may be used to prepare a lithog. printing plate that is resistant to press chemical and can optionally be baked to increase press run-length.
- IT **868279-66-7**, Methacrylamide-methacrylic acid-Plex 68520-N-phenylmaleimide copolymer **868279-67-8**, Methacrylic acid-N-methoxymethylmethacrylamide-Plex 68520-N-phenylmaleimide copolymer **868279-68-9**, Acrylonitrile-methacrylic acid-Plex 68520-N-phenylmaleimide copolymer  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (printing plate precursor comprising solvent-resistant copolymer)
- RN 868279-66-7 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with 2-methyl-2-propenamide, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3

CM 2

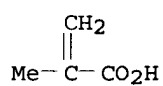
CRN 941-69-5  
CMF C10 H7 N O2



CM 3

CRN 79-41-4

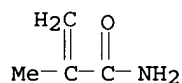
CMF C4 H6 O2



CM 4

CRN 79-39-0

CMF C4 H7 N O



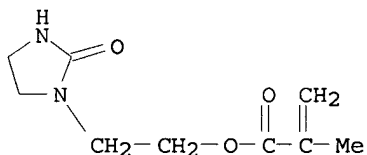
RN 868279-67-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with N-(methoxymethyl)-2-methyl-2-propenamide, 2-(2-oxo-1-imidazolidinyl)ethyl  
2-methyl-2-propenoate and 1-phenyl-1H-pyrrole-2,5-dione (9CI) (CA  
INDEX NAME)

CM 1

CRN 86261-90-7

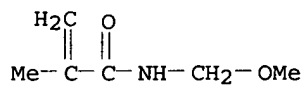
CMF C9 H14 N2 O3



CM 2

CRN 3644-12-0

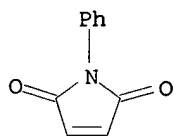
CMF C6 H11 N O2



CM 3

CRN 941-69-5

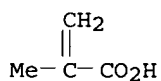
CMF C10 H7 N O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



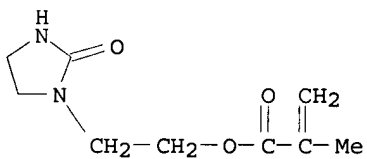
RN 868279-68-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

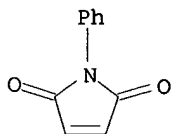
CMF C9 H14 N2 O3



CM 2

CRN 941-69-5

CMF C10 H7 N O2



CM 3

CRN 107-13-1

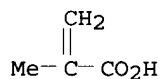
CMF C3 H3 N



CM 4

CRN 79-41-4

CMF C4 H6 O2



IC ICM G03C001-492

INCL 430270100

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)  
Section cross-reference(s): 35

IT **868279-66-7**, Methacrylamide-methacrylic acid-Plex  
68520-N-phenylmaleimide copolymer **868279-67-8**,  
Methacrylic acid-N-methoxymethylmethacrylamide-Plex  
68520-N-phenylmaleimide copolymer **868279-68-9**,  
Acrylonitrile-methacrylic acid-Plex 68520-N-phenylmaleimide  
copolymer

RL: NUU (Other use, unclassified); USES (Uses)  
(printing plate precursor comprising solvent-resistant  
copolymer)

L227 ANSWER 3 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1130754 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 143:389621

TITLE: Polymers with H-bridge forming functionalities  
for improving antiwear protection of  
lubricating oils and hydraulic fluids

INVENTOR(S): Scherer, Markus; Schweder, Roland

PATENT ASSIGNEE(S): Rohmax Additives G.m.b.H., Germany

SOURCE: PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

-----  
 WO 2005097956 A1 20051020 WO 2005-EP1905 2005  
 0224

WO 2005097956 C1 20051215  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,  
 CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,  
 ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,  
 PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,  
 CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,  
 LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 DE 102004018094 A1 20051103 DE 2004-102004018094

2004  
 0408

PRIORITY APPLN. INFO.:

DE 2004-102004018094A

2004  
 0408

AB The invention relates to lubricating oil formulations comprising copolymers or graft copolymers produced by radically polymerization of polymerizable monomers and in addition comprising long-chain ethylenically unsatd. compds. containing alkyl, in particular **acrylate** or **methacrylate** substitutes provided with H-bridge donator functions. The monomer exhibiting a H-bridge donator property is contained in the polymer backbone or in graft side branches. Apart from the polymers containing monomers provided with the H-bridge donator functions, the invention relates to polymers containing monomers simultaneously carrying donator and acceptor functions. The H-bridge donator functions of a polymer, in particular a simultaneous availability of the H-bridge donator and acceptor functions produce the pos. effects on the antiwear protection and on a detergent and dispersant action. The polymers are suitable, in the form of additives, for lubricating oil formulations (e.g., motor oils or hydraulic fluids) exhibiting an improved antiwear behavior.

IT **837430-76-9D**, Plex 6844-0, copolymer with **methacrylate** alkyl esters

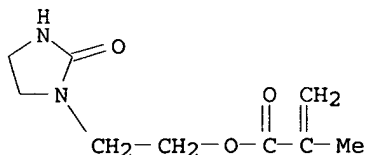
RL: TEM (Technical or engineered material use); USES (Uses)  
 (for improving antiwear protection of lubricating oils and hydraulic fluids)

RN **837430-76-9** HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, mixt. with  
 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA  
 INDEX NAME)

CM 1

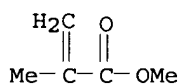
CRN 86261-90-7  
 CMF C9 H14 N2 O3



CM 2

CRN 80-62-6

CMF C5 H8 O2



IC ICM C10M169-04  
 ICS C10M157-04; C10M161-00; C08F265-04; C08F267-06; C08F265-10;  
 C08F267-10; C08F020-12; C08F020-56; C08F020-60  
 CC 51-8 (Fossil Fuels, Derivatives, and Related Products)  
 IT 79-41-4D, Methacrylic acid, copolymers containing alkyl esters  
 88-12-0D, copolymers with **methacrylate** alkyl esters  
 112-38-9D, 10-Undecenoic acid, **reaction** product with  
**methacrylate** alkyl esters 112-55-0D, Dodecylmercaptan,  
**reaction** product with **methacrylate** alkyl esters  
 9043-30-5D, Lutensol T020, copolymer with **methacrylate**  
 alkyl esters 25103-58-6D, tert-Dodecylmercaptan,  
**reaction** product with **methacrylate** alkyl esters  
 837430-76-9D, Plex 6844-0, copolymer with  
**methacrylate** alkyl esters  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (for improving antiwear protection of lubricating oils and  
 hydraulic fluids)  
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 4 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:735355 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 143:194686  
 TITLE: Water-whitening resistant **pressure**  
 -sensitive **adhesive**  
 INVENTOR(S): Lee, Sou Phong  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 15 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
-----				
US 2005176876	A1	20050811	US 2004-774617	2004 0209

WO 2005077986

A1

20050825

WO 2005-US3317

2005

0203

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,  
 CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,  
 ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,  
 PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
 TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,  
 CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,  
 LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2004-774617

A

2004

0209

AB **Pressure-sensitive adhesive** compns. that resist water-whitening are provided. The compns. comprise emulsion copolymers formed from a plurality of monomers that includes (meth)acrylic monomers, at least one **trifluoroalkyl(meth)acrylate monomer**, and at least one **alkylimidazolidone (meth)acrylate monomer**. Preferably, the (meth)acrylic monomers comprise a plurality of **soft monomers**, at least one **hard monomer** and at least one **acid monomer**. The plurality of monomers may further include at least one aliphatic urethane di(meth)acrylate, an oligomer. The **pressure-sensitive adhesive** composition also comprises a surfactant system including at least one surfactant.

IT 861509-70-8P 861509-72-0P

RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)

(water-whitening resistant **pressure-sensitive adhesive**)

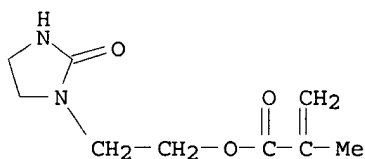
RN 861509-70-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

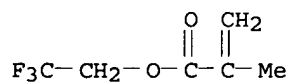
CMF C9 H14 N2 O3



CM 2

CRN 352-87-4

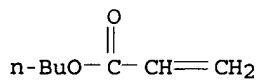
CMF C6 H7 F3 O2



CM 3

CRN 141-32-2

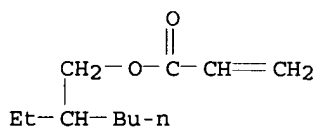
CMF C7 H12 O2



CM 4

CRN 103-11-7

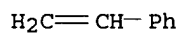
CMF C11 H20 O2



CM 5

CRN 100-42-5

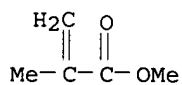
CMF C8 H8



CM 6

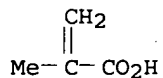
CRN 80-62-6

CMF C5 H8 O2



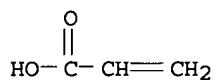
CM 7

CRN 79-41-4  
CMF C4 H6 O2



CM 8

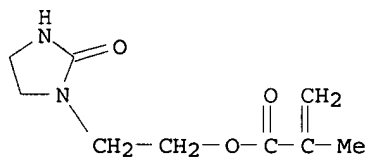
CRN 79-10-7  
CMF C3 H4 O2



RN 861509-72-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, Ebecryl 230, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



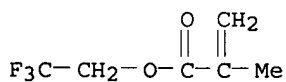
CM 2

CRN 74092-50-5  
CMF Unspecified  
CCI PMS, MAN

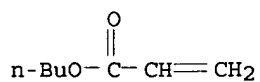
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 3

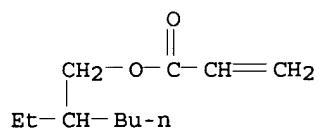
CRN 352-87-4  
CMF C6 H7 F3 O2



CM 4

CRN 141-32-2  
CMF C7 H12 O2

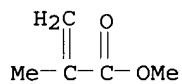
CM 5

CRN 103-11-7  
CMF C11 H20 O2

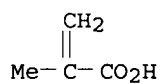
CM 6

CRN 100-42-5  
CMF C8 H8

CM 7

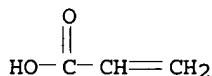
CRN 80-62-6  
CMF C5 H8 O2

CM 8

CRN 79-41-4  
CMF C4 H6 O2

CM 9

CRN 79-10-7  
CMF C3 H4 O2



IC ICM C08K003-00  
INCL 524556000; 526319000  
CC 37-3 (Plastics Manufacture and Processing)  
ST **trifluoroalkyl alkylimidazolidone**  
**acrylate copolymer pressure sensitive**  
**adhesive**  
IT **Adhesives**  
(**pressure-sensitive**; water-whitening resistant  
**pressure-sensitive adhesive**)  
IT **861509-70-8P 861509-72-0P**  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)  
(water-whitening resistant **pressure-sensitive**  
**adhesive**)

L227 ANSWER 5 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:735078 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 143:178424  
TITLE: Gel/air freshener system  
INVENTOR(S): Conover, Donald  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 3 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005175578	A1	20050811	US 2005-37278	2005 0118
PRIORITY APPLN. INFO.:				2004 0211
US 2004-543581P				P
US 2004-548244P				P
				2004 0227

AB A powder mixture for mixing with water to form a gel for a gel/air freshener system includes a fragrance, amorphous fumed silica, a super-absorbent polymer and a surfactant. The mixture can also include a dye and a deodorizer, which may replace a portion of the fragrance or be in combination with the fragrance.  
IT **132893-93-7, Norsocryl**  
RL: NUU (Other use, unclassified); USES (Uses)  
(gel/air freshener system)  
RN 132893-93-7 HCAPLUS

CN Norsocryl (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IC ICM A61L009-00

ICS A61L009-01; A61L009-04

INCL 424076100

CC 59-6 (Air Pollution and Industrial Hygiene)

IT 7631-86-9, Silica, uses 9003-04-7, Sodium polyacrylate

25155-30-0, Nacconol 90G 132893-93-7, Norsocryl

306275-73-0, Ordenone 847678-26-6, Norsocryl XFS

RL: NUU (Other use, unclassified); USES (Uses)

(gel/air freshener system)

L227 ANSWER 6 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:638911 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 143:116279

TITLE: Method for the preparation of resin-reinforced aqueous polymeric dispersions

INVENTOR(S): Do Amaral, Marcelo; Asua Gonzalez, Jose Maria

PATENT ASSIGNEE(S): Universidad Del Pais Vasco Euskal Herriko

Unibertsitatea, Spain

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Spanish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005066217	A1	20050721	WO 2005-ES4	20050105

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

ES 2237327	A1	20050716	ES 2004-21	20040107
------------	----	----------	------------	----------

PRIORITY APPLN. INFO.:	ES 2004-21	A	20040107
------------------------	------------	---	----------

AB The method comprises a miniemulsion polymerization step and an emulsion polymerization step to produce reinforced aqueous polymeric dispersions having improved mech., phys., and colloidal properties. The miniemulsion polymerization mixture contains at least one amphiphilic polymer as stabilizer, a hydrophobic stabilizer, and at least one  $\alpha,\beta$ -unsatd. monomer, e.g., vinyl, (meth)acrylic, styrenic, and polymerization produces polymer drops in aqueous dispersion. The emulsion polymerization consists of mixing the aqueous dispersion from the miniemulsion polymerization step and at least one unsatd. ethylenic

monomer, an stabilizer, and at least one free radical initiator to effect polymerization. The resulting reinforced latexes have high solids content, adequate viscosity, dispersibility, and substrate wetting, and intensified lustre, pigment wetting dispersibility, penetration resistance, high mech. and shear stability, high stability to freezing/thawing and high polymer volume content. The reinforced latexes are suitable for use as binders in paints for art applications and in coating formulations.

IT 132893-93-7, Norsocryl  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C18-22, acrylic polymer, binder component; mini-emulsion and emulsion polymerization sequence in preparation of water soluble acrylic resin latex for binder uses)  
RN 132893-93-7 HCAPLUS  
CN Norsocryl (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IC ICM C08F002-22  
ICS C08F002-24  
CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 42  
IT 132893-93-7, Norsocryl  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C18-22, acrylic polymer, binder component; mini-emulsion and emulsion polymerization sequence in preparation of water soluble acrylic resin latex for binder uses)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 7 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:822890 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 141:315120  
TITLE: Emulsifier compositions containing diphenyl ether derivatives  
INVENTOR(S): Van Es, Steven; Dupont, Olivier  
PATENT ASSIGNEE(S): UCB S.A., Belg.  
SOURCE: Eur. Pat. Appl., 20 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1464656	A1	20041006	EP 2003-7782	2003 0404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CA 2521180	AA	20041014	CA 2004-2521180	2004 0402
WO 2004087769	A1	20041014	WO 2004-EP3546	2004 0402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,				

KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,  
 PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
 TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,  
 CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM,  
 GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1613664 A1 20060111 EP 2004-725361

2004  
 0402

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
 EE, HU, PL, SK, HR

PRIORITY APPLN. INFO.:

EP 2003-7782

A

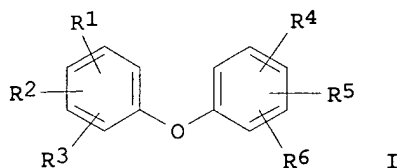
2003  
 0404

WO 2004-EP3546

W

2004  
 0402

OTHER SOURCE(S): MARPAT 141:315120  
 GI



AB The invention relates to an emulsifier mixture comprising of at least one emulsifier I, wherein one or two of R1 to R6 groups are SO<sub>3</sub>M, one or two of R1 to R6 groups are a C1-18 alkyl group and M is a cation, and of at least one emulsifier chosen from linear or branched alkyl ether sulfates, and its use in aqueous polymer dispersions and emulsion polymers for manufacture of **pressure** -sensitive **adhesives** in for transparent adhesive films. A typical dispersion was manufactured by emulsion polymerization of 2-ethylhexyl **acrylate** (II), styrene, Et **acrylate**, Me **acrylate**, methacrylic acid, acrylic acid (III), and **ethylimidazolidone methacrylate** in the presence of (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub>, Luperox H70, Rongalit C, biocide, Na<sub>2</sub>CO<sub>3</sub>·2H<sub>2</sub>O, Fe(NO<sub>3</sub>)<sub>3</sub>, Rhodapex L12 (fatty alc. ether sulfate, Na salt, ethylene oxide d.p. 12, alkyl radical C12-18), Ufapol DMA PS2 (mixture of mono- and dialkyl disulfonated di-Ph oxide, disodium salt), and a seed prepared by polymerization of II, Bu **acrylate**, styrene, and III.

IT 768383-82-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (emulsifier compns. containing di-Ph ether alkyl derivs. sulfonate salts and alkyl ether sulfates for emulsion polymerization of acrylic monomers in manufacture of transparent adhesives for films)

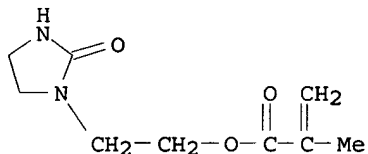
RN 768383-82-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

ethenylbenzene, 2-ethylhexyl 2-propenoate, ethyl 2-propenoate,  
methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl  
2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

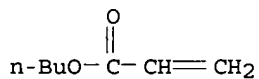
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



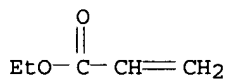
CM 2

CRN 141-32-2  
CMF C7 H12 O2



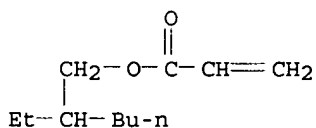
CM 3

CRN 140-88-5  
CMF C5 H8 O2



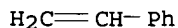
CM 4

CRN 103-11-7  
CMF C11 H20 O2

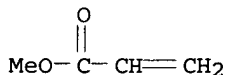


CM 5

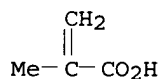
CRN 100-42-5  
CMF C8 H8



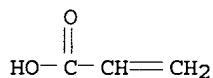
CM 6

CRN 96-33-3  
CMF C4 H6 O2

CM 7

CRN 79-41-4  
CMF C4 H6 O2

CM 8

CRN 79-10-7  
CMF C3 H4 O2

- IC ICM C08F002-26  
ICS C09J133-06
- CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38
- ST diphenyl ether deriv emulsifier acrylic polymn transparent  
adhesive manuf; polyoxyethylene ether sulfate emulsifier  
transparent **pressure** sensitive **adhesive**;  
**ethylimidazolidone methacrylate** copolymer manuf  
transparent **pressure** sensitive **adhesive**;  
methacrylic copolymer manuf transparent **pressure**  
sensitive **adhesive**; styrene acrylic copolymer manuf  
transparent **pressure** sensitive **adhesive**;  
**acrylate** copolymer manuf transparent **pressure**  
sensitive **adhesive**; alkyl ether sulfate emulsifier  
acrylic polymn transparent adhesive manuf
- IT **Adhesives**  
(**pressure**-sensitive, water-thinned; emulsifier  
comps. containing di-Ph ether alkyl derivs. sulfonate salts and  
alkyl ether sulfates for emulsion polymerization of acrylic monomers  
in manufacture of transparent adhesives for films)
- IT 768383-82-0P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered)

material use); PREP (Preparation); USES (Uses)  
(emulsifier compns. containing di-Ph ether alkyl derivs. sulfonate  
salts and alkyl ether sulfates for emulsion polymerization of acrylic  
monomers in manufacture of transparent adhesives for films)

L227 ANSWER 8 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:663446 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 141:314925

TITLE: Effect of the particle size distribution on  
the low shear viscosity of high-solid-content  
latexes

AUTHOR(S): do Amaral, Marcelo; van Es, Steven; Asua, Jose  
M.

CORPORATE SOURCE: Institute for Polymer Materials and Grupo de  
Ingenieria Quimica, Facultad de Ciencias  
Quimicas, University of the Basque Country,  
Donostia-San Sebastian, 20080, Spain

SOURCE: Journal of Polymer Science, Part A: Polymer  
Chemistry (2004), 42(16), 3936-3946  
CODEN: JPACEC; ISSN: 0887-624X

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The production of high-solid-content, low-viscosity latexes is an  
active field in both industry and academia. The viscosity of  
polymer dispersions has a clear dependence on the particle size  
distribution (PSD). An example is the rule of thumb that a  
bimodal PSD enables the reduction of the viscosity with respect to  
monomodal systems. Despite important progress in theor. work, not  
much was done to quant. predict the low shear viscosity of aqueous  
polymer dispersions as a function of the complex PSD. In this  
work, the capability of a low-shear-viscosity equation to quant.  
account for the influence of both the PSD and the physicochem.  
characteristics of the dispersions is exptl. assessed. An anal.,  
consistent with theor. concepts, of the data with semiempirical  
correlations is proposed. Next, with values of the parameters of  
the viscosity equation obtained exptl., the effect of a latex with  
a 70% solid content on the low shear viscosity is examined

IT 132893-93-7, Norsocryl

RL: NUU (Other use, unclassified); USES (Uses)

(co-stabilizer; particle size distribution effects on low shear  
viscosity of high-solid-content polymer dispersions)

RN 132893-93-7 HCAPLUS

CN Norsocryl (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CC 36-7 (Physical Properties of Synthetic High Polymers)

IT 544-76-3, Hexadecane 132893-93-7, Norsocryl

RL: NUU (Other use, unclassified); USES (Uses)

(co-stabilizer; particle size distribution effects on low shear  
viscosity of high-solid-content polymer dispersions)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 9 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:606956 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 141:144585

TITLE: Additives for building materials based on  
hydraulic binders

AUTHOR(S): Anon.

CORPORATE SOURCE: UK

SOURCE: Research Disclosure (2004), 482(June),  
P830-P831 (No. 482090)  
CODEN: RSDSBB; ISSN: 0374-4353  
PUBLISHER: Kenneth Mason Publications Ltd.  
DOCUMENT TYPE: Journal; Patent  
LANGUAGE: German  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 482090		20040610		
PRIORITY APPLN. INFO.: 20040610			RD 2004-482090	
AB	The composition of either copolymer aqueous dispersions or powders are presented, which application results in strength and flexibility improvement especially at low temps. The composition containing: (a) 40-80% at least of an <b>acrylate</b> with C2-C12 alkanols, (b) 10-40% at least of a vinyl-aromatic <b>monomer</b> and/or <b>methacrylate</b> with C1-C4 alkanols, (c) 0.1-9.9% at least of an <b>acrylate</b> or <b>methacrylate</b> with C2-C10 alkanols, (d) 0.1-5% of an <b>ethylimidazolidone acrylate</b> and/or <b>ethylimidazolidone methacrylate</b> , (e) at most 1% of an ethylenically unsatd. monomers, (f) less than 5% of an $\alpha,\beta$ -ethylenically unsatd. nitriles, and (g) less than 1% of an amide of $\alpha,\beta$ -ethylenically unsatd. mono- or dicarboxylic acid.			
CC	58-1 (Cement, Concrete, and Related Building Materials) Section cross-reference(s): 38			
ST	hydraulic binder additive copolymer <b>acrylate methacrylate</b> ; cement mortar hydraulic binder			
IT	10344-93-1, <b>Acrylate</b> , uses 18358-13-9, <b>Methacrylate</b> , uses RL: NUU (Other use, unclassified); USES (Uses) (additives for building materials based on hydraulic binders)			

L227 ANSWER 10 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:470349 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 141:24789  
TITLE: Aqueous polymer dispersions, their manufacture and use as **pressure** sensitive **adhesives**  
INVENTOR(S): Van Es, Steven; Dupont, Olivier; Segers, Willy  
PATENT ASSIGNEE(S): UCB S.A., Belg.  
SOURCE: Eur. Pat. Appl., 17 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

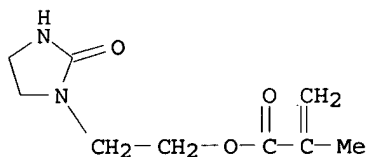
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1426428	A1	20040609	EP 2002-27263	2002 1206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CA 2507132	AA	20040624	CA 2003-2507132	2003

WO 2004053011 A1 20040624 WO 2003-EP13496 1201  
 2003  
 1201  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,  
 CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,  
 ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
 RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,  
 CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,  
 GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 EP 1570019 A1 20050907 EP 2003-782259 2003  
 1201  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
 EE, HU, SK  
 PRIORITY APPLN. INFO.: EP 2002-27263 A 2002  
 1206  
 WO 2003-EP13496 W 2003  
 1201  
 AB The aqueous polymer dispersions contain specific copolymers which are  
 composed of  $\geq 4$  different ethylenically unsatd. monomers.  
 More specifically the copolymers comprise 5-92.5%  $\geq 1$  alkyl  
**acrylate** the homopolymers of which have a Tg  
 $\leq -40^\circ$  (constituent a), 2.5-30%  $\geq 1$  alkyl  
 (meth)**acrylate** the homopolymers of which have a Tg  $-25$   
 to  $0^\circ$  (constituent b), 2.5-30%  $\geq 1$  alkyl (meth)  
**acrylate** the homopolymers of which have a Tg  $0-20^\circ$   
 (constituent c), 2.5-30%  $\geq 1$  ethylenically unsatd. monomer  
 the homopolymers of which have a Tg  $\geq 20^\circ$  and which  
 do not contain a functional group selected from hydroxy, acid,  
 acid anhydride, nitro, epoxy and amino groups (constituent d),  
 0-10%  $\geq 1$  ethylenically unsatd. monomer having  $\geq 1$   
 acid group or acid anhydride group (constituent e), and 0-60%  
 $\geq 1$  ethylenically unsatd. monomer having either no further  
 functional group or in addition to the ethylenically unsatd. group  
 $\geq 1$  functional group other than an acid group or an acid  
 anhydride group (constituent f).  
 IT 697799-11-4P, Acrylic acid-butyl **acrylate**-ethyl  
**acrylate**-2-ethylhexyl **acrylate**-N-(2-(2-oxo-1-  
 imidazolidinyl)ethyl) **methacrylate**  
 -methacrylic acid-methyl **acrylate**-methyl  
**methacrylate**-styrene copolymer  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
 or engineered material use); PREP (Preparation); USES (Uses)  
 (aqueous polymer dispersions as **pressure** sensitive  
**adhesives** having low water whitening characteristics,  
 high shear strength, excellent peel strength and loop tack)  
 RN 697799-11-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,  
 ethenylbenzene, 2-ethylhexyl 2-propenoate, ethyl 2-propenoate,  
 methyl 2-methyl-2-propenoate, methyl 2-propenoate,

2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and  
2-propenoic acid (9CI) (CA INDEX NAME)

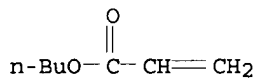
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



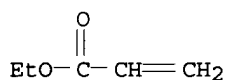
CM 2

CRN 141-32-2  
CMF C7 H12 O2



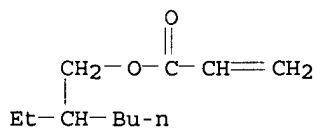
CM 3

CRN 140-88-5  
CMF C5 H8 O2



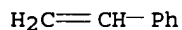
CM 4

CRN 103-11-7  
CMF C11 H20 O2

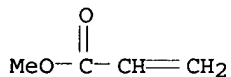


CM 5

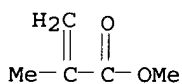
CRN 100-42-5  
CMF C8 H8



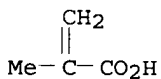
CM 6

CRN 96-33-3  
CMF C4 H6 O2

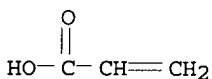
CM 7

CRN 80-62-6  
CMF C5 H8 O2

CM 8

CRN 79-41-4  
CMF C4 H6 O2

CM 9

CRN 79-10-7  
CMF C3 H4 O2

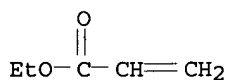
IT 149729-49-7P, Ethyl acrylate-2-ethylhexyl  
acrylate-methyl acrylate-styrene copolymer  
697799-12-5P, Ethyl acrylate-2-ethylhexyl  
acrylate-methyl acrylate copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(aqueous polymer dispersions as **pressure** sensitive  
**adhesives** having low water whitening characteristics,  
high shear strength, excellent peel strength and loop tack)  
RN 149729-49-7 HCAPLUS  
CN 2-Propenoic acid, 2-ethylhexyl ester, polymer with ethenylbenzene,

ethyl 2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

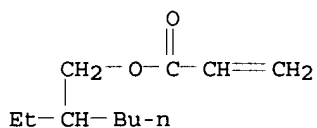
CMF C5 H8 O2



CM 2

CRN 103-11-7

CMF C11 H20 O2



CM 3

CRN 100-42-5

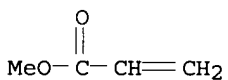
CMF C8 H8



CM 4

CRN 96-33-3

CMF C4 H6 O2



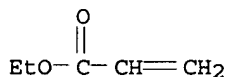
RN 697799-12-5 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-ethylhexyl  
2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

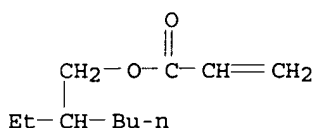
CMF C5 H8 O2



CM 2

CRN 103-11-7

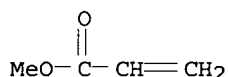
CMF C11 H20 O2



CM 3

CRN 96-33-3

CMF C4 H6 O2



IC ICM C09J133-08

ICS C08F220-10

CC 38-3 (Plastics Fabrication and Uses)

ST **adhesive pressure sensitive aq dispersion**IT **Adhesives**

(**pressure**-sensitive; aqueous polymer dispersions as **pressure sensitive adhesives** having low water whitening characteristics, high shear strength, excellent peel strength and loop tack)

IT **697799-11-4P, Acrylic acid-butyl acrylate-ethyl****acrylate-2-ethylhexyl acrylate-N-(2-(2-oxo-1-****imidazolidinyl)ethyl) methacrylate****-methacrylic acid-methyl acrylate-methyl****methacrylate-styrene copolymer**

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(aqueous polymer dispersions as **pressure sensitive adhesives** having low water whitening characteristics, high shear strength, excellent peel strength and loop tack)

IT **149729-49-7P, Ethyl acrylate-2-ethylhexyl****acrylate-methyl acrylate-styrene copolymer****697799-12-5P, Ethyl acrylate-2-ethylhexyl****acrylate-methyl acrylate copolymer**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(aqueous polymer dispersions as **pressure sensitive adhesives** having low water whitening characteristics, high shear strength, excellent peel strength and loop tack)

REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE

## IN THE RE FORMAT

L227 ANSWER 11 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:292058 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 140:305082  
 TITLE: Removable water-whitening resistant  
**pressure-sensitive acrylic  
 adhesives**  
 INVENTOR(S): Guo, Jong-shing; Chen, Augustin T.; Trembley,  
 Sharon D.  
 PATENT ASSIGNEE(S): Ucb, S.A., Belg.  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004029171	A1	20040408	WO 2003-US30412	2003 0925
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2499815	AA	20040408	CA 2003-2499815	2003 0925
US 2004116598	A1	20040617	US 2003-671095	2003 0925
EP 1546279	A1	20050629	EP 2003-770483	2003 0925
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006501328	T2	20060112	JP 2004-539976	2003 0925
PRIORITY APPLN. INFO.:				2002 0926
US 2002-413846P				2002 0926
WO 2003-US30412				2003 0925
AB Title <b>pressure-sensitive adhesive</b> (PSA) having a peel strength <2.5 lb per in. comprises a <b>crosslinked</b> aqueous emulsion polymer containing 50-90 weight%				

hydrophobic monomers selected from alkyl (meth)acrylate and styrenic monomers, 2-10 weight% hydrophilic monomers, and 5-25 weight% partially hydrophilic monomers selected from C1-2 alkyl (meth)acrylate and N-vinyl-2-pyrrolidone, a polyfunctional aziridine **crosslinking** agent, such as N-aminoethyl-N-aziridinylethylamine and N,N-bis-2-aminopropyl-N-aziridinylethyl amine, and a non-polymerizable and polymerizable **surfactant**, such as allyl amine salt of an alkyl benzene sulfoante or a polyoxyalkylene-1-(allyloxymethyl)alkyl ether sulfate salt. Thus, **acrylic acid**, Bu acrylate, 2-ethylhexyl acrylate, **methacrylic acid**, Me acrylate, and Me methacrylate were emulsion polymerization using ammonium lauryl ether sulfate **surfactant**, and then **crosslinked** with trimethylolpropane tris( $\beta$ -N-aziridinyl)propionate (CX 100) to obtain a PSA.

IT 676515-48-3P 676515-49-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(removable water-whitening resistant **pressure-sensitive acrylic adhesives**)

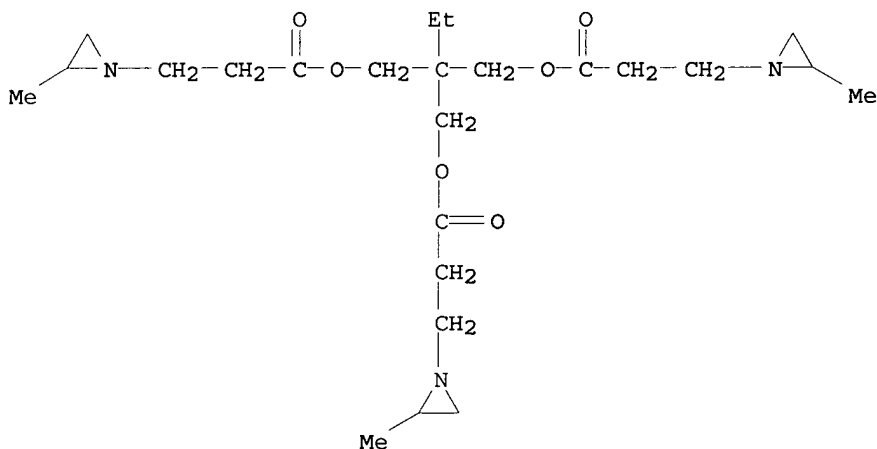
RN 676515-48-3 HCAPLUS

CN 1-Aziridinepropanoic acid, 2-methyl-, 2-ethyl-2-[[3-(2-methyl-1-aziridinyl)-1-oxopropoxy]methyl]-1,3-propanediyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate, 2-methyl-2-propenoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 64265-57-2

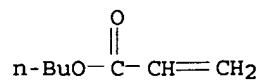
CMF C24 H41 N3 O6



CM 2

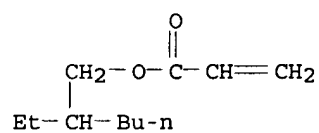
CRN 141-32-2

CMF C7 H12 O2



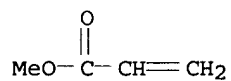
CM 3

CRN 103-11-7  
CMF C11 H20 O2



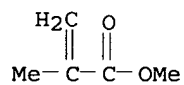
CM 4

CRN 96-33-3  
CMF C4 H6 O2



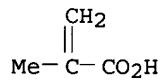
CM 5

CRN 80-62-6  
CMF C5 H8 O2



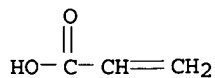
CM 6

CRN 79-41-4  
CMF C4 H6 O2



CM 7

CRN 79-10-7  
CMF C3 H4 O2



RN 676515-49-4 HCAPLUS

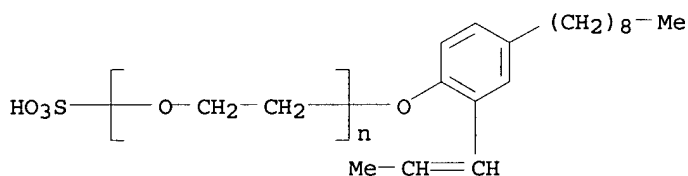
CN 1-Aziridinepropanoic acid, 2-methyl-, 2-ethyl-2-[[3-(2-methyl-1-aziridinyl)-1-oxopropoxy]methyl]-1,3-propanediyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-methyl-2-propenoic acid, 2-propenoic acid and  $\alpha$ -sulfo- $\omega$ -[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 140651-97-4

CMF (C2 H4 O)<sub>n</sub> C18 H28 O4 S . H3 N

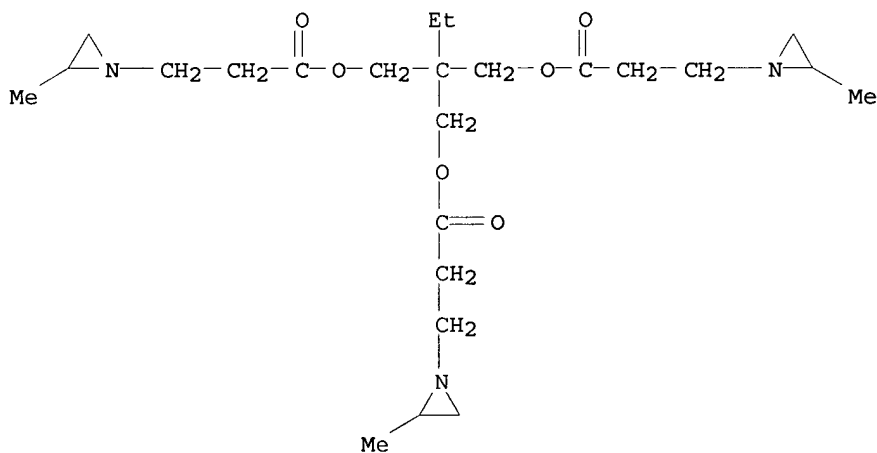
CCI PMS



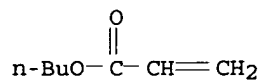
CM 2

CRN 64265-57-2

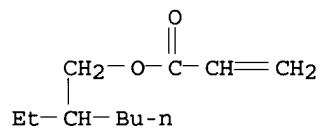
CMF C24 H41 N3 O6



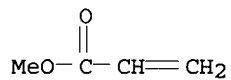
CM 3

CRN 141-32-2  
CMF C7 H12 O2

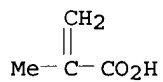
CM 4

CRN 103-11-7  
CMF C11 H20 O2

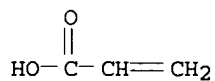
CM 5

CRN 96-33-3  
CMF C4 H6 O2

CM 6

CRN 79-41-4  
CMF C4 H6 O2

CM 7

CRN 79-10-7  
CMF C3 H4 O2

IC ICM C09J133-06

CC 38-3 (Plastics Fabrication and Uses)  
 ST **acrylic acid** butyl ethylhexyl methyl acrylate  
 methacrylate aziridine adhesive  
 IT Polyoxyalkylenes, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (acrylic; removable water-whitening resistant **pressure**  
**-sensitive acrylic adhesives**)  
 IT Polymerization  
 (emulsion, radical; removable water-whitening resistant  
**pressure-sensitive acrylic adhesives**  
 )  
 IT **Adhesives**  
 (**pressure-sensitive**; removable  
 water-whitening resistant **pressure-sensitive**  
 acrylic adhesives)  
 IT **Crosslinking agents**  
**Surfactants**  
 (removable water-whitening resistant **pressure-**  
**sensitive acrylic adhesives**)  
 IT 32612-48-9, Ammonium lauryl ether sulfate  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (emulsifier; removable water-whitening resistant  
**pressure-sensitive acrylic adhesives**  
 )  
 IT **676515-48-3P 676515-49-4P**  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (removable water-whitening resistant **pressure-**  
**sensitive acrylic adhesives**)  
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 12 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:157447 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 140:201103  
 TITLE: Use of gradient copolymers as dispersing agent  
 for the treatment of pigments and solids  
 INVENTOR(S): Goebelt, Bernd; Haubennestel, Karlheinz;  
 Krappe, Udo; Della Valentina, Petra  
 PATENT ASSIGNEE(S): BYK-Chemie G.m.b.H., Germany  
 SOURCE: Ger. Offen., 17 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
DE 10236133	A1	20040226	DE 2002-10236133	2002 0807
TW 592794	B	20040621	TW 2003-92119040	2003 0711
CA 2435516	AA	20040207	CA 2003-2435516	2003

EP 1416019	A1	20040506	EP 2003-17316	0718
				2003
				0731
EP 1416019	B1	20050518		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 295871	E	20050615	AT 2003-17316	
				2003
				0731
ES 2240896	T3	20051016	ES 2003-3017316	
				2003
				0731
JP 2004066235	A2	20040304	JP 2003-287916	
				2003
				0806
CN 1495204	A	20040512	CN 2003-158622	
				2003
				0807
US 2004143035	A1	20040722	US 2003-636319	
				2003
				0807
PRIORITY APPLN. INFO.:		DE 2002-10236133	A	
				2002
				0807

AB Copolymers are manufactured by continuously living, controlled polymerization of ethylenically unsatd. compds. in the presence of nonpolymeric monofunctional initiators in such a way that the products exhibit a gradual hydrophilicity to hydrophobicity along the chains. These copolymers are post-treated to give dispersing agents for pigments in coatings and fillers in plastics,. A typical dispersant was manufactured by heating 3.3 mL benzenesulfonyl chloride, 103 g Bu **methacrylate**, 1 g 2,2'-bipyridine and 400 mg Cu powder in 25 mL methoxypropyl acetate (I) to 100°, adding 65 g N,N'-dimethylaminoethyl **methacrylate** at 0.8 mL/min, heating 5 min at 100° heating 168 g polymer 2 h at 100° with 52 g benzyl chloride in 150 g each I and ethylene glycol mono-Bu ether until the reaction was complete.

IT 24938-16-7P, Butyl **methacrylate**  
 -N,N-dimethylaminoethyl **methacrylate**-methyl **methacrylate** copolymer 25702-92-5P, Butyl **methacrylate**-2-hydroxyethyl **methacrylate** copolymer 25951-87-5P, Butyl **methacrylate**-glycidyl **methacrylate** copolymer 26658-83-3P, Butyl **methacrylate**-N,N-dimethylaminoethyl **methacrylate** copolymer 28549-52-2P, Butyl **methacrylate**-tert-butyl **methacrylate** copolymer 143363-32-0P, Butyl **methacrylate**-N,N-dimethylaminoethyl **methacrylate**-2-ethylhexyl **methacrylate** copolymer 661478-14-4P, Butyl **methacrylate**-1-(2-methacryloyloxyethyl)-2-imidazolidinone **methacrylate** copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (dispersant precursor; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

RN 24938-16-7 HCAPLUS

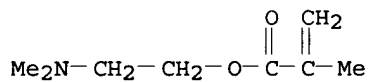
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

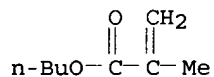
CMF C8 H15 N O2



CM 2

CRN 97-88-1

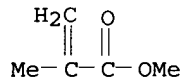
CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



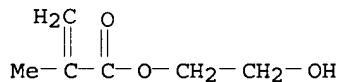
RN 25702-92-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

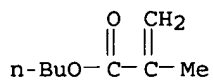
CMF C6 H10 O3



CM 2

CRN 97-88-1

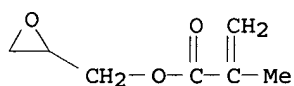
CMF C8 H14 O2



RN 25951-87-5 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
 oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

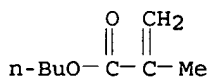
CM 1

CRN 106-91-2  
 CMF C7 H10 O3



CM 2

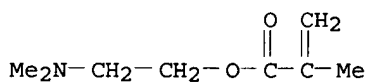
CRN 97-88-1  
 CMF C8 H14 O2



RN 26658-83-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
 2-(dimethylamino)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX  
 NAME)

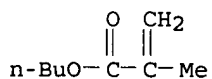
CM 1

CRN 2867-47-2  
 CMF C8 H15 N O2



CM 2

CRN 97-88-1  
 CMF C8 H14 O2



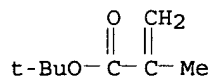
RN 28549-52-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
1,1-dimethylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 585-07-9

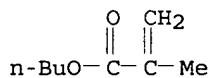
CMF C8 H14 O2



CM 2

CRN 97-88-1

CMF C8 H14 O2



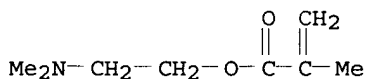
RN 143363-32-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

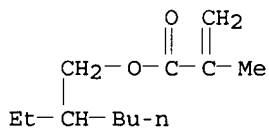
CMF C8 H15 N O2



CM 2

CRN 688-84-6

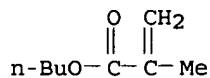
CMF C12 H22 O2



CM 3

CRN 97-88-1

CMF C8 H14 O2



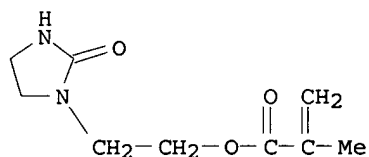
RN 661478-14-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA  
INDEX NAME)

CM 1

CRN 86261-90-7

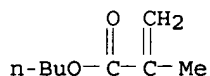
CMF C9 H14 N2 O3



CM 2

CRN 97-88-1

CMF C8 H14 O2



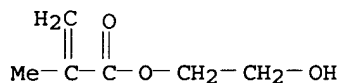
IT 25702-92-5DP, Butyl **methacrylate**-2-hydroxyethyl  
**methacrylate** copolymer, esters with polyphosphoric acids  
28549-52-2DP, Butyl **methacrylate**-tert-butyl  
**methacrylate** copolymer, hydrolyzed 146267-18-7P,  
Butyl **methacrylate**-N,N-dimethylaminoethyl  
**methacrylate** copolymer benzyl chloride salt  
661478-15-5P, Butyl **methacrylate**  
-N,N-dimethylaminoethyl **methacrylate**-methyl  
**methacrylate** copolymer benzyl chloride salt  
661478-16-6P, Butyl **methacrylate**  
-N,N-dimethylaminoethyl **methacrylate**-2-ethylhexyl  
**methacrylate** copolymer benzyl chloride salt  
663152-70-3P, Butyl **methacrylate**-glycidyl  
**methacrylate** copolymer p-nitrobenzoate  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use);  
TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)  
(dispersant; use of copolymers with hydrophilicity-  
hydrophobicity gradient along chains as dispersing agents for  
pigments and fillers)

RN 25702-92-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

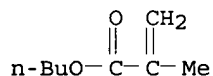
CM 1

CRN 868-77-9  
CMF C6 H10 O3



CM 2

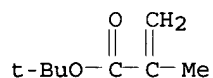
CRN 97-88-1  
CMF C8 H14 O2



RN 28549-52-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
1,1-dimethylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

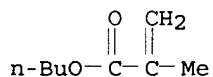
CM 1

CRN 585-07-9  
CMF C8 H14 O2



CM 2

CRN 97-88-1  
CMF C8 H14 O2



RN 146267-18-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, compd. with  
(chloromethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-44-7  
CMF C7 H7 Cl



CM 2

CRN 26658-83-3

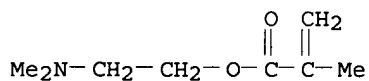
CMF (C8 H15 N O2 . C8 H14 O2)x

CCI PMS

CM 3

CRN 2867-47-2

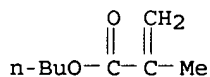
CMF C8 H15 N O2



CM 4

CRN 97-88-1

CMF C8 H14 O2



RN 661478-15-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl  
 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI)  
 (CA INDEX NAME)

CM 1

CRN 100-44-7

CMF C7 H7 Cl



CM 2

CRN 24938-16-7

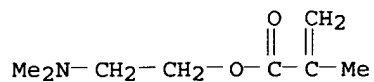
CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x

CCI PMS

CM 3

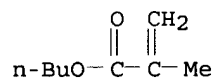
CRN 2867-47-2

CMF C8 H15 N O2



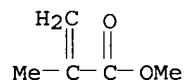
CM 4

CRN 97-88-1  
CMF C8 H14 O2



CM 5

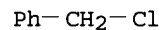
CRN 80-62-6  
CMF C5 H8 O2



RN 661478-16-6 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl  
2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI)  
(CA INDEX NAME)

CM 1

CRN 100-44-7  
CMF C7 H7 Cl

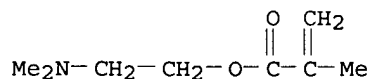


CM 2

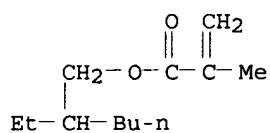
CRN 143363-32-0  
CMF (C12 H22 O2 . C8 H15 N O2 . C8 H14 O2)x  
CCI PMS

CM 3

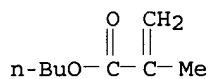
CRN 2867-47-2  
CMF C8 H15 N O2



CM 4

CRN 688-84-6  
CMF C12 H22 O2

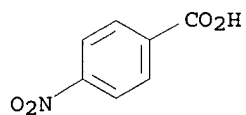
CM 5

CRN 97-88-1  
CMF C8 H14 O2

RN 663152-70-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
oxiranylmethyl 2-methyl-2-propenoate, 4-nitrobenzoate (9CI) (CA  
INDEX NAME)

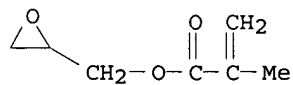
CM 1

CRN 62-23-7  
CMF C7 H5 N O4

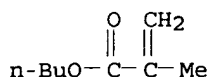
CM 2

CRN 25951-87-5  
CMF (C8 H14 O2 . C7 H10 O3)x  
CCI PMS

CM 3

CRN 106-91-2  
CMF C7 H10 O3

CM 4

CRN 97-88-1  
CMF C8 H14 O2

- IC ICM B01F017-52  
CC 42-6 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 35, 37  
ST acrylic polymer dispersing agent pigment coating; filler plastic  
acrylic polymer dispersing agent; butyl **methacrylate**  
dimethylaminoethyl **methacrylate** benzyl quaternized manuf  
IT Polymerization  
(RAFT; of **methacrylate** compds. for manufacture of polymers  
with hydrophilicity-hydrophobicity gradient along chains as  
dispersing agents for pigments and fillers)  
IT Polymerization  
(atom transfer, radical; of **methacrylate** compds. for  
manufacture of polymers with hydrophilicity-hydrophobicity gradient  
along chains as dispersing agents for pigments and fillers)  
IT Polyphosphoric acids  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use);  
TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)  
(esters, with Bu **methacrylate**-hydroxyethyl  
**methacrylate** copolymer, dispersants; use of copolymers  
with hydrophilicity-hydrophobicity gradient along chains as  
dispersing agents for pigments and fillers)  
IT Polymerization  
(group-transfer; of **methacrylate** compds. for manufacture  
of polymers with hydrophilicity-hydrophobicity gradient along  
chains as dispersing agents for pigments and fillers)  
IT 24938-16-7P, Butyl **methacrylate**  
-N,N-dimethylaminoethyl **methacrylate**-methyl  
**methacrylate** copolymer 25702-92-5P, Butyl  
**methacrylate**-2-hydroxyethyl **methacrylate**  
copolymer 25951-87-5P, Butyl **methacrylate**  
-glycidyl **methacrylate** copolymer 26658-83-3P,  
Butyl **methacrylate**-N,N-dimethylaminoethyl  
**methacrylate** copolymer 28549-52-2P, Butyl  
**methacrylate**-tert-butyl **methacrylate** copolymer  
143363-32-0P, Butyl **methacrylate**  
-N,N-dimethylaminoethyl **methacrylate**-2-ethylhexyl  
**methacrylate** copolymer 661478-14-4P, Butyl  
**methacrylate**-1-(2-methacryloyloxyethyl)-2-imidazolidinone  
**methacrylate** copolymer  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP  
(Preparation); RACT (Reactant or reagent)  
(dispersant precursor; use of copolymers with  
hydrophilicity-hydrophobicity gradient along chains as  
dispersing agents for pigments and fillers)  
IT 25702-92-5DP, Butyl **methacrylate**-2-hydroxyethyl  
**methacrylate** copolymer, esters with polyphosphoric acids  
28549-52-2DP, Butyl **methacrylate**-tert-butyl  
**methacrylate** copolymer, hydrolyzed 146267-18-7P,

Butyl methacrylate-N,N-dimethylaminoethyl  
 methacrylate copolymer benzyl chloride salt  
 661478-15-5P, Butyl methacrylate  
 -N,N-dimethylaminoethyl methacrylate-methyl  
 methacrylate copolymer benzyl chloride salt  
 661478-16-6P, Butyl methacrylate  
 -N,N-dimethylaminoethyl methacrylate-2-ethylhexyl  
 methacrylate copolymer benzyl chloride salt  
 663152-70-3P, Butyl methacrylate-glycidyl  
 methacrylate copolymer p-nitrobenzoate  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (dispersant; use of copolymers with hydrophilicity-  
 hydrophobicity gradient along chains as dispersing agents for  
 pigments and fillers)

L227 ANSWER 13 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:749999 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 139:262270  
 TITLE: Internally plasticized and low-VOC latex  
 compositions and their applications  
 INVENTOR(S): Thames, Shelby Freland; Wang, Zhiyu; Brister,  
 Elizabeth H.; Hariharan, Rajan; King, Corey  
 L.; Panjnani, Kamlesh Gopichand  
 PATENT ASSIGNEE(S): University of Southern Mississippi, USA  
 SOURCE: U.S., 25 pp., Cont.-in-part of U. S. Ser. No.  
 773,741.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6624223	B1	20030923	US 1999-460946	1999 1214
US 6203720	B1	20010320	US 1996-773741	1996 1224
WO 2001044380	A2	20010621	WO 2000-US33577	2000 1211
WO 2001044380	A3	20011213		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2003045609	A1	20030306	US 2002-118586	2002 0408
US 6897257	B2	20050524		

## PRIORITY APPLN. INFO.:

US 1996-773741

A2

1996  
1224

US 1999-460946

A

1999  
1214

AB Title compns. with low odor for use in waterborne coatings, contact and **pressure-sensitive adhesives**, and inks comprise an aqueous dispersion containing (a) a polymer obtained by polymerization of (i) an internally plasticized and **crosslinkable** monomer derived from a semi-drying or non-drying oil with  $\geq 1$  unsatd. monomers and (ii)  $\geq 1$  comonomers, (b) a **surfactant**, and (c) a drier selected from aliphatic carboxylic acid salts of Co, Mn, Pb, Zr, Ca and mixts. thereof, wherein the total weight% of the polymer in the aqueous dispersion is 5-80%, based on total weight of the composition; and the monomers (i) and (ii) are present in a weight ratio ranging from .apprx.1:2 to .apprx.1:99. The compns. form films at low min. film-forming temps. -5 to 10° and cure to above ambient glass transition (Tg) polymers without the use of traditional organic solvents which contribute to environmental pollution via volatile organic compds. (VOCs) emissions.

IT 224791-01-9P 603956-25-8P 603956-26-9P  
603956-27-0P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(internally plasticized and low-VOC latex compns. for coatings, inks, and adhesives)

RN 224791-01-9 HCAPLUS

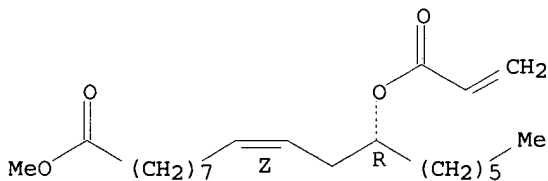
CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxyl]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 14202-22-3

CMF C22 H38 O4

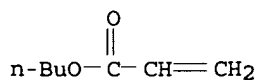
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

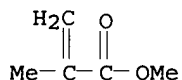
CRN 141-32-2

CMF C7 H12 O2



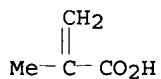
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

CRN 79-41-4  
CMF C4 H6 O2

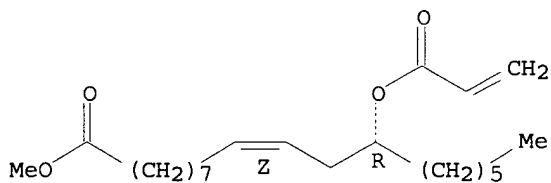


RN 603956-25-8 HCAPLUS  
CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester,  
(9Z,12R)-, polymer with butyl 2-propenoate and ethenylbenzene  
(9CI) (CA INDEX NAME)

CM 1

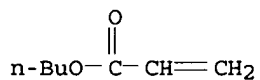
CRN 14202-22-3  
CMF C22 H38 O4

Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

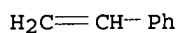
CRN 141-32-2  
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



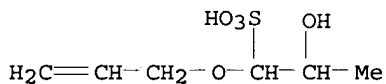
RN 603956-26-9 HCAPLUS

CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate, 2-hydroxy-1-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 143187-46-6

CMF C6 H12 O5 S . Na



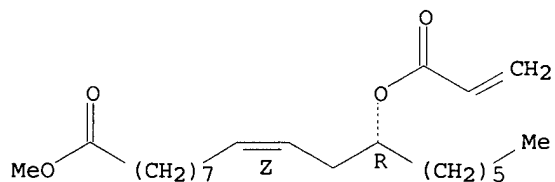
● Na

CM 2

CRN 14202-22-3

CMF C22 H38 O4

Absolute stereochemistry.  
Double bond geometry as shown.



CM 3

CRN 141-32-2

CMF C7 H12 O2

CRN 80-62-6  
CMF C5 H8 O2

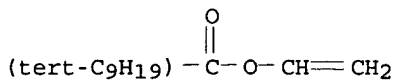
CRN 79-10-7  
CMF C3 H4 O2

RN	603956-27-0	HCAPLUS
CN	11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenyl acetate and ethenyl tert-decanoate (9CI) (CA INDEX NAME)	

CRN 330197-62-1  
CMF C24 H42 O4

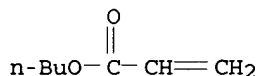
Absolute stereochemistry.  
Double bond geometry as shown.

CRN 26544-09-2  
CMF C12 H22 O2  
CCI IDS



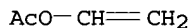
CM 3

CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 108-05-4  
CMF C4 H6 O2



IC ICM C08K005-098  
ICS C08K005-10; C08L091-00; C09D011-10; C07C059-00  
INCL 524398000; 524399000; 524400000; 524310000; 524313000; 523160000;  
554219000  
CC 42-7 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 38  
IT **Adhesives**  
(pressure-sensitive; internally plasticized  
and low-VOC latex compns. for adhesives)  
IT 79-41-4DP, **Methacrylic acid**, polymers with Bu  
acrylate, Me methacrylate and Me ricinoleate acrylate  
108-05-4DP, Vinyl acetate, polymers with Bu acrylate,  
(meth)acrylated castor oil, and Me ricinoleate acrylate  
141-32-2DP, Butyl acrylate, polymers with vinyl acetate and castor  
oil methacrylates 814-68-6DP, Acryloyl chloride, reaction  
products with castor oil, polymers with (meth)acrylates  
920-46-7DP, Methacryloyl chloride, reaction products with castor  
oil, polymers with (meth)acrylates 115047-92-2DP, Sipomer BEM,  
polymers with lesquerella oil acrylate, vinyl acetate, and  
acrylates **224791-01-9P 603956-25-8P**  
**603956-26-9P 603956-27-0P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); USES (Uses)  
(internally plasticized and low-VOC latex compns. for coatings,  
inks, and adhesives)  
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 14 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:590862 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 139:151145  
TITLE: Acrylic polymer emulsion coatings for films,  
paper and rubber articles

INVENTOR(S): Lee, Ivan S.  
 PATENT ASSIGNEE(S): Avery Dennison Corp., USA  
 SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part  
 of U.S. 6,465,591.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003144446	A1	20030731	US 2002-270749	2002 1015
US 6828399	B2	20041207		
US 6465591	B1	20021015	US 2000-556236	2000 0424
PRIORITY APPLN. INFO.:			US 2000-556236	A2 2000 0424

AB The acrylic polymer is formed in the presence of **surfactants**, preferably by sequential polymerization of two sep. monomer mixts. which include an alkyl (meth)acrylate, a quaternary amine (meth)acrylate, a hydroxyalkyl (meth)acrylate, an N-vinyl lactam, an ethylenically unsatd. carboxylic acid, and a fluorinated (meth)acrylate. To form a coating, the polymer is blended with an elastomer such as nitrile rubber latex. The coating is useful both for substrates used with ink-jet printers and for rubber articles.

IT **566197-90-8P, Acrylic acid-Agefex FA**  
 1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-  
**Methacrylic acid-Methyl acrylate**  
 -Methyl methacrylate-Trifluoroethyl  
 methacrylate-N-vinylpyrrolidone copolymer ammonium salt  
**566197-92-0P, Acrylic acid-Agefex FA**  
 1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-polyethylene  
 glycol monomethacrylate methacrylate-**Methacrylic**  
**acid-Methyl acrylate-Methyl methacrylate**  
 -Trifluoroethyl methacrylate  
 -N-vinylpyrrolidone copolymer ammonium salt **566197-94-2P**  
**, Acrylic acid-Agefex FA** 1Q80MC-Butyl  
 acrylate-2-hydroxyethyl acrylate-polyethylene glycol  
 monomethacrylate-2-hydroxyethyl methacrylate-**Methacrylic**  
**acid-Methyl acrylate-Methyl methacrylate**  
 -Trifluoroethyl methacrylate  
 -N-vinylpyrrolidone copolymer ammonium salt  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
 or engineered material use); PREP (Preparation); USES (Uses)  
 (acrylic polymer emulsion coatings for films, paper and rubber  
 articles)

RN 566197-90-8 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-,  
 chloride, polymer with butyl 2-propenoate, 1-ethenyl-2-  
 pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl  
 2-methyl-2-propenoate, methyl 2-propenoate, 2-methyl-2-propenoic  
 acid, 2-propenoic acid and trifluoroethyl 2-methyl-2-propenoate,  
 ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 566197-89-5

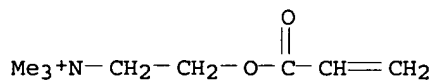
CMF (C8 H16 N O2 . C7 H12 O2 . C6 H10 O3 . C6 H9 N O . C6 H7 F3  
O2 . C5 H8 O2 . C4 H6 O2 . C4 H6 O2 . C3 H4 O2 . Cl)x

CCI PMS

CM 2

CRN 44992-01-0

CMF C8 H16 N O2 . Cl

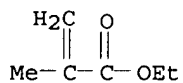
● Cl<sup>-</sup>

CM 3

CRN 38785-10-3

CMF C6 H7 F3 O2

CCI IDS

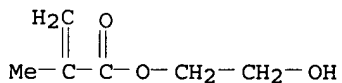


3 ( D1-F )

CM 4

CRN 868-77-9

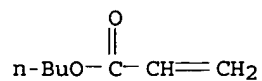
CMF C6 H10 O3



CM 5

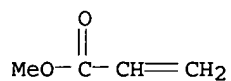
CRN 141-32-2

CMF C7 H12 O2



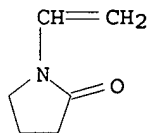
CM 6

CRN 96-33-3  
CMF C4 H6 O2



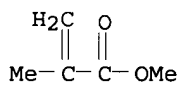
CM 7

CRN 88-12-0  
CMF C6 H9 N O



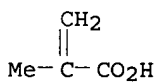
CM 8

CRN 80-62-6  
CMF C5 H8 O2



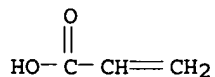
CM 9

CRN 79-41-4  
CMF C4 H6 O2



CM 10

CRN 79-10-7  
CMF C3 H4 O2



RN 566197-92-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), methyl 2-propenoate, 2-methyl-2-propenoic acid, 2-propenoic acid and trifluoroethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 566197-91-9

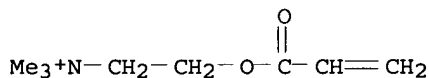
CMF (C8 H16 N O2 . C7 H12 O2 . C6 H10 O3 . C6 H9 N O . C6 H7 F3 O2 . C5 H8 O2 . C4 H6 O2 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C4 H6 O2 . Cl)x

CCI PMS

CM 2

CRN 44992-01-0

CMF C8 H16 N O2 . Cl

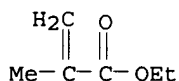
● Cl<sup>-</sup>

CM 3

CRN 38785-10-3

CMF C6 H7 F3 O2

CCI IDS



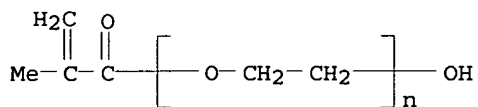
3 ( D1-F )

CM 4

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2

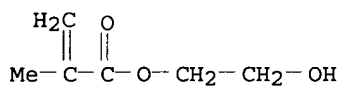
CCI PMS



CM 5

CRN 868-77-9

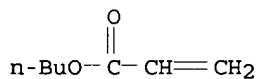
CMF C6 H10 O3



CM 6

CRN 141-32-2

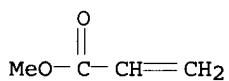
CMF C7 H12 O2



CM 7

CRN 96-33-3

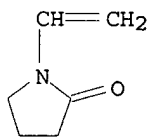
CMF C4 H6 O2



CM 8

CRN 88-12-0

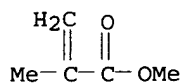
CMF C6 H9 N O



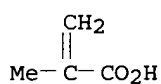
CM 9

CRN 80-62-6

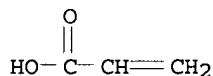
CMF C5 H8 O2



CM 10

CRN 79-41-4  
CMF C4 H6 O2

CM 11

CRN 79-10-7  
CMF C3 H4 O2

RN 566197-94-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), methyl 2-propenoate, 2-methyl-2-propenoic acid, 2-propenoic acid and trifluoroethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 566197-93-1

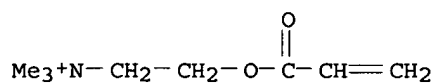
CMF (C8 H16 N O2 . C7 H12 O2 . C6 H10 O3 . C6 H9 N O . C6 H7 F3 O2 . C5 H8 O3 . C5 H8 O2 . C4 H6 O2 . C4 H6 O2 . C3 H4 O2 . (C2 H4 O)n C4 H6 O2 . Cl)x

CCI PMS

CM 2

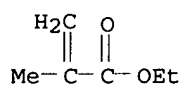
CRN 44992-01-0

CMF C8 H16 N O2 . Cl



CM 3

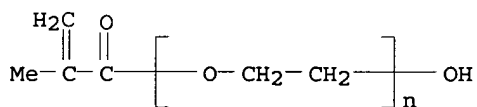
CRN 38785-10-3  
 CMF C6 H7 F3 O2  
 CCI IDS



3 ( D1-- F )

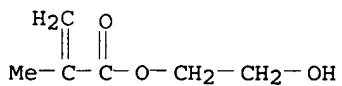
CM 4

CRN 25736-86-1  
 CMF (C2 H4 O)<sub>n</sub> C4 H6 O2  
 CCI PMS



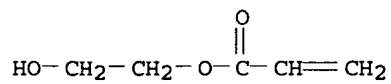
CM 5

CRN 868-77-9  
 CMF C6 H10 O3

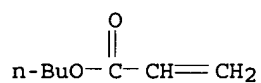


CM 6

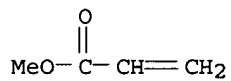
CRN 818-61-1  
 CMF C5 H8 O3



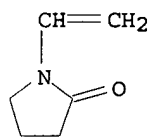
CM 7

CRN 141-32-2  
CMF C7 H12 O2

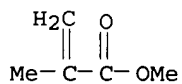
CM 8

CRN 96-33-3  
CMF C4 H6 O2

CM 9

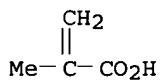
CRN 88-12-0  
CMF C6 H9 N O

CM 10

CRN 80-62-6  
CMF C5 H8 O2

CM 11

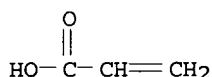
CRN 79-41-4  
CMF C4 H6 O2



CM 12

CRN 79-10-7

CMF C3 H4 O2



IC ICM B32B009-00  
 INCL 526317100; 428431000; 002161700; 002168000; 428483000; 428492000  
 CC 42-7 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 38, 39, 43, 74  
 IT Synthetic rubber, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (acrylonitrile-butadiene-methacrylic acid,  
 Synthomer 6000; acrylic polymer emulsion coatings for films,  
 paper and rubber articles)  
 IT **Adhesives**  
 (pressure-sensitive; acrylic polymer  
 emulsion coatings for adhesive release liners)  
 IT **566197-90-8P, Acrylic acid-Agefex FA**  
**1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-**  
**Methacrylic acid-Methyl acrylate**  
**-Methyl methacrylate-Trifluoroethyl**  
**methacrylate-N-vinylpyrrolidone copolymer ammonium salt**  
**566197-92-0P, Acrylic acid-Agefex FA**  
**1Q80MC-Butyl acrylate-2-hydroxyethyl methacrylate-polyethylene**  
**glycol monomethacrylate methacrylate-Methacrylic**  
**acid-Methyl acrylate-Methyl methacrylate**  
**-Trifluoroethyl methacrylate**  
**-N-vinylpyrrolidone copolymer ammonium salt 566197-94-2P**  
**, Acrylic acid-Agefex FA 1Q80MC-Butyl**  
**acrylate-2-hydroxyethyl acrylate-polyethylene glycol**  
**monomethacrylate-2-hydroxyethyl methacrylate-Methacrylic**  
**acid-Methyl acrylate-Methyl methacrylate**  
**-Trifluoroethyl methacrylate**  
**-N-vinylpyrrolidone copolymer ammonium salt**  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
 or engineered material use); PREP (Preparation); USES (Uses)  
 (acrylic polymer emulsion coatings for films, paper and rubber  
 articles)  
 IT 569668-97-9, SRI 13796-51  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinkers; acrylic polymer emulsion coatings for  
 films, paper and rubber articles)  
 IT 32535-84-5, Ammonium zirconyl carbonate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (crosslinkers; acrylic polymer emulsion coatings for  
 films, paper and rubber articles)  
 REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 15 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:509970 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 139:70232  
 TITLE: Removable **pressure-sensitive**  
 acrylic **adhesive** for adhesive sheets  
 with excellent weatherability and pot life  
 INVENTOR(S): Yamanaka, Takeshi; Itou, Shinetsu; Shibata,  
 Kenichi; Suto, Takeshi; Miyoshi, Isamu  
 PATENT ASSIGNEE(S): Nitto Denko Corporation, Japan  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1323802	A2	20030702	EP 2002-28142	2002 1218
EP 1323802	A3	20031203		
EP 1323802	B1	20050302		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003183612	A2	20030703	JP 2001-386164	2001 1219
US 2003124346	A1	20030703	US 2002-314949	2002 1210
US 6869678	B2	20050322		
PRIORITY APPLN. INFO.:			JP 2001-386164	A 2001 1219

AB A **pressure-sensitive adhesive** comprises (I) 100 parts by weight on a solid basis of an aqueous dispersion type acrylic copolymer obtained by polymerizing a monomer mixture in an aqueous medium in the presence of a nonionic **surfactant** and/or an anionic **surfactant** each having an ethylenic double bond, and (II) 0.1 to 3 parts by weight of a hindered-amine light stabilizer having a piperidine ring in which the nitrogen atom has a tertiary amine structure. The adhesive can be applied to metal sheets or to metallic members which have undergone a coating treatment and can be easily removed therefrom. Thus, an adhesive was prepared by mixing Tinuvin 765, Tinuvin 213, WS 500, and a polymer derived from Bu acrylate, Bu methacrylate, **acrylic acid**, 4-nonyl-2-propenylphenylpolyoxyethylene, and 4-Nonyl-2-propenylphenylpolyoxyethylene ammonium sulfate.

IT 30174-70-0, WS 500  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinking agent; production of removable **pressure-sensitive acrylic adhesive** for adhesive sheets)

RN 30174-70-0 HCAPLUS

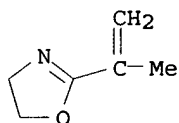
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 4,5-dihydro-2-(1-methylethenyl)oxazole (9CI) (CA

## INDEX NAME)

CM 1

CRN 10471-78-0

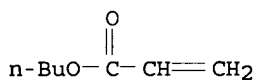
CMF C6 H9 N O



CM 2

CRN 141-32-2

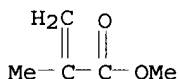
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IT 350821-38-4P, **Acrylic acid-butyl**  
 acrylate-butyl methacrylate-oxirane graft copolymer ammonium  
 sulfate 552283-14-4P, **Acrylic acid**  
 -butyl acrylate-butyl methacrylate-2-polyethylene  
 glycol-4-nonyl-2-propenylphenylpolyoxyethylene-4-nonyl-2-  
 propenylphenylpolyoxyethyleneammonium sulfate graft copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (production of removable **pressure-sensitive**  
 acrylic **adhesive** for adhesive sheets)

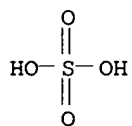
RN 350821-38-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl  
 2-propenoate, oxirane and 2-propenoic acid, hydrogen sulfate,  
 graft, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

CMF H2 O4 S



CM 2

CRN 350821-37-3

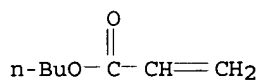
CMF (C8 H14 O2 . C7 H12 O2 . C3 H4 O2 . C2 H4 O)x

CCI PMS

CM 3

CRN 141-32-2

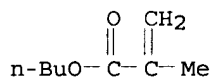
CMF C7 H12 O2



CM 4

CRN 97-88-1

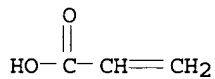
CMF C8 H14 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



CM 6

CRN 75-21-8

CMF C2 H4 O



RN 552283-14-4 HCAPLUS

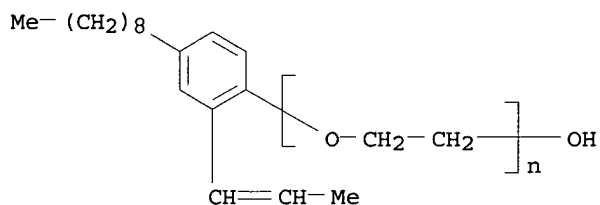
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate,  $\alpha$ -[4-nonyl-2-(1-propenyl)phenyl]- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), 2-propenoic acid and  $\alpha$ -sulfo- $\omega$ -[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt, graft (9CI) (CA INDEX NAME)

CM 1

CRN 146847-27-0

CMF (C2 H4 O)<sub>n</sub> C18 H28 O

CCI PMS

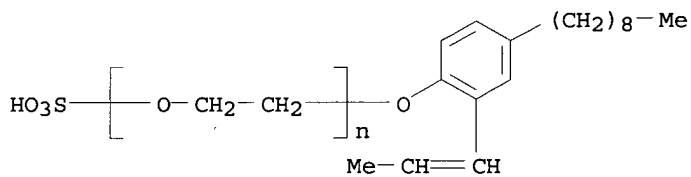


CM 2

CRN 140651-97-4

CMF (C2 H4 O)<sub>n</sub> C18 H28 O4 S . H3 N

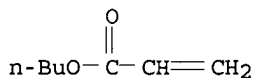
CCI PMS



CM 3

CRN 141-32-2

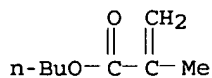
CMF C7 H12 O2



CM 4

CRN 97-88-1

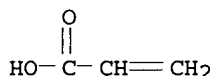
CMF C8 H14 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



- IC ICM C09J133-08  
ICS C09J007-02
- CC 38-3 (Plastics Fabrication and Uses)
- ST **pressure sensitive acrylic adhesive**  
sheet hindered amine light stabilizer
- IT Amines, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(hindered, light stabilizer; production of removable  
**pressure-sensitive acrylic adhesive**  
for adhesive sheets)
- IT **Adhesives**  
(**pressure-sensitive**; production of removable  
**pressure-sensitive acrylic adhesive**  
for adhesive sheets)
- IT **Crosslinking agents**  
Light stabilizers  
UV stabilizers  
(production of removable **pressure-sensitive**  
**acrylic adhesive** for adhesive sheets)
- IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(production of removable **pressure-sensitive**  
**acrylic adhesive** for adhesive sheets)
- IT **Adhesives**  
(sheets; production of removable **pressure-**  
**sensitive acrylic adhesive** for adhesive  
sheets)
- IT 3864-99-1, Tinuvin 327 136457-10-8, Tinuvin 213  
RL: MOA (Modifier or additive use); USES (Uses)  
(UV absorbers; production of removable **pressure-**  
**sensitive acrylic adhesive** for adhesive  
sheets)
- IT 30174-70-0, WS 500  
RL: MOA (Modifier or additive use); USES (Uses)  
(**crosslinking agent**; production of removable  
**pressure-sensitive acrylic adhesive**  
for adhesive sheets)
- IT 41556-26-7, Tinuvin 765 106990-43-6, Chimassorb 119FL  
RL: MOA (Modifier or additive use); USES (Uses)  
(hindered-amine light stabilizer; production of removable  
**pressure-sensitive acrylic adhesive**  
for adhesive sheets)

IT 7727-54-0, Ammonium persulfate  
 RL: CAT (Catalyst use); USES (Uses)  
 (polymerization catalysts; production of removable **pressure-sensitive acrylic adhesive** for adhesive sheets)

IT 350821-38-4P, **Acrylic acid-butyl**  
 acrylate-butyl methacrylate-oxirane graft copolymer ammonium sulfate 552283-14-4P, **Acrylic acid**  
 -butyl acrylate-butyl methacrylate-2-polyethylene glycol-4-nonyl-2-propenylphenylpolyoxyethylene-4-nonyl-2-propenylphenylpolyoxyethyleneammonium sulfate graft copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (production of removable **pressure-sensitive acrylic adhesive** for adhesive sheets)

L227 ANSWER 16 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:376194 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 138:369678  
 TITLE: High solids content, low-viscosity emulsion polymers for adhesives and binders  
 INVENTOR(S): Lee, Ivan  
 PATENT ASSIGNEE(S): Avery Dennison Corp., USA  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
US 2003091778	A1	20030515	US 2002-264453	2002 1004
US 6706356	B2	20040316		
PRIORITY APPLN. INFO.:			US 2001-327238P	P 2001 1005

AB Emulsion polymers useful in the preparation of coatings and **adhesives**, including **pressure-sensitive adhesive** tapes, labels, and other constructions, are provided. The polymers are characterized by high solids content and low viscosity. A method of making the polymers is also provided. A plurality of acrylic monomers are copolymerized in the presence of a plurality of surfactants, using a split feed, and the resulting emulsion polymers have a bimodal or higher particle-size distribution.

IT 510744-90-8P, **Acrylic acid-2-ethylhexyl acrylate**  
 -methacrylic acid-methyl **acrylate**-Norsocryl  
 104-N-vinyl-2-pyrrolidone copolymer  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (high solids content, low-viscosity emulsion polymers for adhesives and binders)

RN 510744-90-8 HCAPLUS

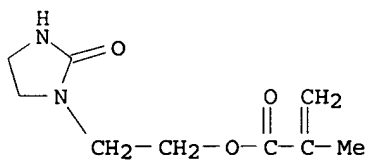
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and

2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

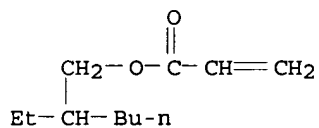
CMF C9 H14 N2 O3



CM 2

CRN 103-11-7

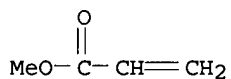
CMF C11 H20 O2



CM 3

CRN 96-33-3

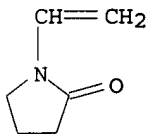
CMF C4 H6 O2



CM 4

CRN 88-12-0

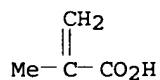
CMF C6 H9 N O



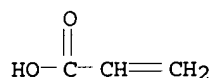
CM 5

CRN 79-41-4

CMF C4 H6 O2



CM 6

CRN 79-10-7  
CMF C3 H4 O2

IC ICM B32B029-02  
ICS C08L033-00; B32B009-00  
INCL 428040100; 428292700; 524556000  
CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38, 42  
IT **510744-90-8P**, Acrylic acid-2-ethylhexyl **acrylate**  
-methacrylic acid-methyl **acrylate**-Norsocryl  
104-N-vinyl-2-pyrrolidone copolymer  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); USES (Uses)  
(high solids content, low-viscosity emulsion polymers for  
adhesives and binders)

L227 ANSWER 17 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:349330 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 138:339415  
TITLE: Solvent-free resin compositions and their  
cured products for optical waveguides  
INVENTOR(S): Yokoshima, Minoru  
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003128731	A2	20030508	JP 2001-330618	2001 1029
JP 3732433	B2	20060105		
PRIORITY APPLN. INFO.:			JP 2001-330618	2001 1029

OTHER SOURCE(S): MARPAT 138:339415  
AB The compns. comprise (A) urethane methacrylates as reaction  
products of R[C(CF<sub>3</sub>)<sub>2</sub>OH]<sub>2</sub> [R = C<sub>6</sub>H<sub>10</sub>, C<sub>6</sub>H<sub>4</sub>-p-OC<sub>6</sub>H<sub>4</sub>-p, 5-Cl-13  
(fluoro)alkyl-(un)substituted 1,3-phenylene] with  
2-isocyanatoethyl methacrylate (I) and (B) ethylenically unsatd.  
compds. Thus, a dimethacrylate compound (II) prepared from

1,4-bis(hexafluoro-2-hydroxy-2-propyl)cyclohexane and I was mixed with 1,6-hexanediol diacrylate and a photopolymer. initiator to give a composition, which was applied on a substrate and UV-cured to give a layer. Then, a composition containing II, phenoxyethyl acrylate, and the initiator was applied on the above layer, masked, UV-cured, and developed to give an optical waveguide pattern, and the former curable composition was applied on the pattern and the lower cladding layer and UV-cured to give a multimode-channel optical waveguide.

IT 517855-07-1P 517855-08-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(solvent-free urethane methacrylate-ethylenically unsatd. compound comps. and their cured products for optical waveguides)

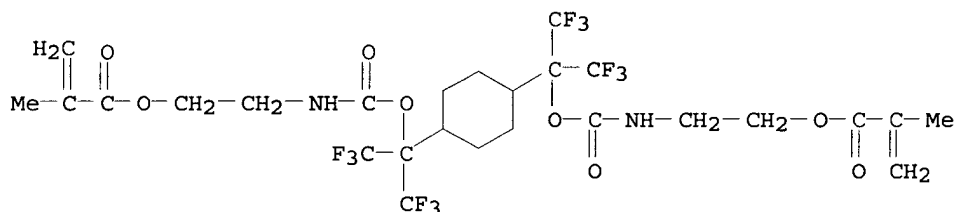
RN 517855-07-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,4-cyclohexanediylbis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxycarbonylimino-2,1-ethanediyl] ester, polymer with 1,6-hexanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 517855-06-0

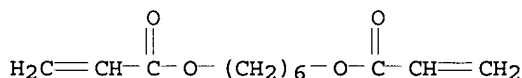
CMF C26 H30 F12 N2 O8



CM 2

CRN 13048-33-4

CMF C12 H18 O4



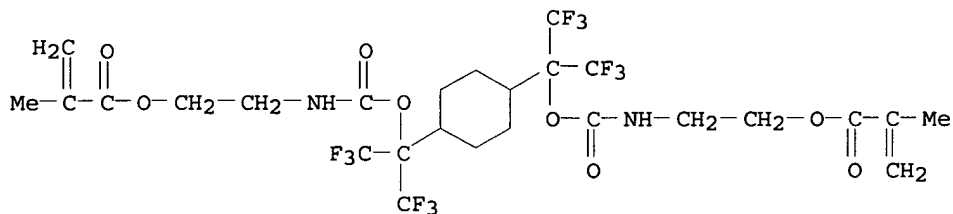
RN 517855-08-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,4-cyclohexanediylbis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxycarbonylimino-2,1-ethanediyl] ester, polymer with 2-phenoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 517855-06-0

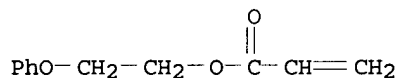
CMF C26 H30 F12 N2 O8



CM 2

CRN 48145-04-6

CMF C11 H12 O3



IC ICM C08F220-36

ICS G02B006-12

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37, 73

ST urethane methacrylate polymer optical waveguide;  
bis(hexafluoroisopropylidene)cyclohexane isocyanatoethyl methacrylate  
**urethane dimethacrylate**; hexanediol**diacrylate urethane dimethacrylate**  
polymer optical waveguide; phenoxyethyl acrylate **urethane**  
**dimethacrylate** polymer optical waveguide

IT 517855-07-1P 517855-08-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)(solvent-free urethane methacrylate-ethylenically unsatd.  
compound compns. and their cured products for optical waveguides)

L227 ANSWER 18 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:244811 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 138:221973

TITLE: **N-Alkylimidazolidinone** (meth)  
**acrylates**, their production and their  
sue

INVENTOR(S): Paul, Jean Michel; Dupont, Bernard

PATENT ASSIGNEE(S): ATOFINA, Fr.

SOURCE: Fr. Demande, 21 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2829134	A1	20030307	FR 2001-11178	2001 0828
EP 1293502	A1	20030319	EP 2002-292058	2002

0820

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
EE, SK

US 2003096931	A1	20030522	US 2002-225731	2002 0822
US 6706887	B2	20040316		
JP 2003113165	A2	20030418	JP 2002-246272	2002 0827
TW 575568	B	20040211	TW 2002-91119369	2002 0827
CN 1432570	A	20030730	CN 2002-142133	2002 0828
US 2004147761	A1	20040729	US 2003-738940	2003 1215
PRIORITY APPLN. INFO.:			FR 2001-11178	A 2001 0828
		US 2002-225731	A3	2002 0822

OTHER SOURCE(S): MARPAT 138:221973

AB N-Alkylimidazolidinone (meth)acrylates are obtained by the condensation of an alkyl (meth)acrylate with an N-(hydroxyalkyl)-2-imidazolidinone in the presence of a catalyst, which is a lithium chelate of a 1,3-dicarbonyl compound, in solution. The prepared monomers, which are obtained with less discoloration than with prior-art methods, are suitable for producing polymers usable in various applications. In an example, 1-(2-hydroxyethyl)-2-imidazolidinone was refluxed with Me methacrylate in 4-methoxyphenol containing Li acetylacetonate to give 1-[2-(methacryloyloxy)ethyl]-2-imidazolidinone in 33.3% yield with APHA color 41, compared to 35.7 and 100, resp., when using Ca bis(acetylacetonate).

IC ICM C07D233-32  
ICS C07D239-10; C07D243-04; C07D247-02; C08F020-34; C09D133-14;  
C09J133-14

CC 35-2 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 28

ST ethylimidazolidinone methacrylate prodn  
lithium acetylacetonate catalyst discoloration prevention

IT Esterification catalysts  
Polymerization inhibitors  
(in production of alkylimidazolidinone (meth)  
acrylates with decreased discoloration)

IT 18115-70-3, Lithium acetylacetonate, uses 18223-35-3  
22441-09-4 22441-13-0 22643-60-3 52122-13-1 52122-15-3  
70902-15-7 127892-64-2 182188-18-7  
RL: CAT (Catalyst use); USES (Uses)  
(catalyst; in production of alkylimidazolidinone (meth)  
acrylates with decreased discoloration)

IT 1305-62-0, Calcium hydroxide, uses 1305-78-8, Calcium oxide,  
uses 2414-98-4, Magnesium diethoxide 19372-44-2, Calcium  
bis(acetylacetonate), uses  
RL: CAT (Catalyst use); USES (Uses)

(cocatalyst; in production of **alkylimidazolidinone** (meth)  
**acrylates** with decreased discoloration)

IT 92-84-2, Phenothiazine 106-50-3, p-Phenylenediamine, uses  
 123-31-9, Hydroquinone, uses 128-37-0, Di-tert-butyl-p-cresol,  
 uses 150-76-5, 4-Methoxyphenol 2564-83-2, TEMPO 25377-22-4,  
 Di-tert-butylcatechol  
 RL: CAT (Catalyst use); USES (Uses)  
 (polymerization inhibitor; in production of **alkylimidazolidinone**  
 (meth)**acrylates** with decreased discoloration)

IT 86261-90-7P, 1-[2-(**Methacryloyloxy**)ethyl]-2-  
**imidazolidinone**  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (production of **alkylimidazolidinone** (meth)  
**acrylates** with decreased discoloration)

IT 80-62-6, Methyl **methacrylate** 3699-54-5,  
 1-(2-Hydroxyethyl)-2-imidazolidinone  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (starting material; in production of **alkylimidazolidinone**  
 (meth)**acrylates** with decreased discoloration)

L227 ANSWER 19 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:921791 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 137:389256  
 TITLE: Injection molding of polymerizable materials  
 for prosthetic teeth  
 INVENTOR(S): Lichkus, Andrew M.; Bollinger, Wayne C.;  
 Shaffer, Scott E.  
 PATENT ASSIGNEE(S): Dentsply Research & Development Corp., USA  
 SOURCE: U.S., 29 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6488503	B1	20021203	US 2000-734867	2000 1212
CA 2468265	AA	20040506	CA 2002-2468265	2002 1023
WO 2004037112	A1	20040506	WO 2002-US33819	2002 1023
W: CA, JP				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
EP 1437981	A1	20040721	EP 2002-780514	2002 1023
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK				
PRIORITY APPLN. INFO.:			US 1999-171336P	P 1999 1221
			WO 2002-US33819	W 2002 1023

AB A process for producing an artificial tooth comprises injection molding of a polymerizable material into a mold to form an outer external polymeric layer. Then injection molding of the polymerizable material into the mold leads to the formation of an inner polymeric layer applied on the first external layer, and a solid core applied on the inner external layer. A 2-step "preswell" mixing method was used to prepare a precursor blend from which prosthetic teeth were molded. The blend having the following composition in step 1: Me methacrylate 42.40, benzoyl peroxide 0.25, **urethane diacrylate** 6.00, 2,2-bis(4-methacryloxyphenyl)propane 1.50, poly(Me methacrylate-co-ethylene dimethacrylate) (90:10) 49.85%.

IC ICM A61C013-08

INCL 433202100; 264019000

CC 63-7 (Pharmaceuticals)

IT 80-62-6, Methyl methacrylate 97-90-5, Ethylene glycol dimethacrylate 407-47-6, 2,2,2-**Trifluoroethyl acrylate** 3253-39-2, 2,2-Bis(4-methacryloxyphenyl)propane 9011-14-7, Poly(methyl methacrylate) 25777-71-3, Ethylene glycol dimethacrylate-methyl methacrylate copolymer  
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(injection molding of polymerizable materials for prosthetic teeth)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 20 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:107474 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 136:168589

TITLE: Water- and humidity-resistant **pressure sensitive adhesive** compositions having good adhesion to difficult-to-bond substrates and balanced peel and shear properties

INVENTOR(S): Kleiner, Joseph G.; Foreman, Paul B.; Reedell, Scott A.; Ouyang, Jiangbo; Smith, Dawn E.

PATENT ASSIGNEE(S): National Starch and Chemical Investment Holding Corporation, USA

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
WO 2002010306	A2	20020207	WO 2001-US23492	2001 0726
WO 2002010306	A3	20020829		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,			

AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,  
 CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
 PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2000-627488

A

2000

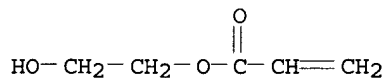
0728

- AB The title compns. comprise: (A) 30-95% an emulsion polymers containing 14-99% alkyl acrylate monomers, (B) 1-50% an aqueous anionic or nonionic dispersion of polyurethane, (C) up to 45% an aqueous dispersion of a tackifying agent and (D) up to 2% a **crosslinking** agent, wherein the amount of A-D is based on dry weight. One example of A was obtained by multi-stage emulsion polymerization from a preemulsion of Bu acrylate 486, Me acrylate 54, **methacrylic acid** 12 and 2-hydroxyethyl acrylate 12 g, with 54 g Bu acrylate and 6 g Me acrylate in the presence of Aerosol MA 80I (a sodium dialkylsulfosuccinate), Witcolate D 51-53 [possibly sodium alkylphenoxypoly(ethyleneoxyethyl) sulfate], Aerosol 22, a tetrasodium 4-[N-(1,2-dicarboxyethyl)-N-octadecylamino]-4-oxo-2-sulfobutanoate, Aerosol OT 75PG (a sodium dialkylsulfosuccinate), as **surfactants**.
- IT **25230-94-8P**, Butyl acrylate-2-hydroxyethyl acrylate-**methacrylic acid**-methyl methacrylate copolymer  
**395643-11-5P**, Butyl acrylate-2-hydroxyethyl acrylate-**methacrylic acid**-methyl acrylate-sodium vinylsulfonate-N-tert-octylacrylamide copolymer  
**395643-12-6P**, Butyl acrylate-2-hydroxyethyl acrylate-**methacrylic acid**-methyl methacrylate-sodium vinylsulfonate-N-tert-octylacrylamide copolymer  
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)  
 (preps. of emulsion polymers for water- and humidity-resistant **pressure sensitive adhesive** compns.)
- RN **25230-94-8** HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI)  
 (CA INDEX NAME)

CM 1

CRN 818-61-1

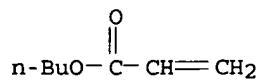
CMF C5 H8 O3



CM 2

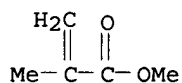
CRN 141-32-2

CMF C7 H12 O2



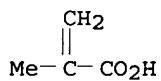
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

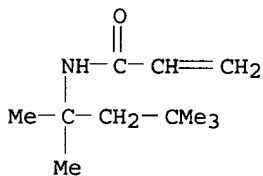
CRN 79-41-4  
CMF C4 H6 O2



RN 395643-11-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-propenoate, sodium ethenesulfonate and N-(1,1,3,3-tetramethylbutyl)-2-propenamide (9CI) (CA INDEX NAME)

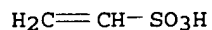
CM 1

CRN 4223-03-4  
CMF C11 H21 N O



CM 2

CRN 3039-83-6  
CMF C2 H4 O3 S . Na

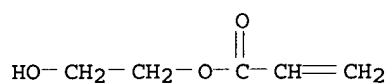


● Na

CM 3

CRN 818-61-1

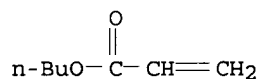
CMF C5 H8 O3



CM 4

CRN 141-32-2

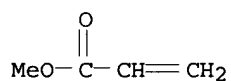
CMF C7 H12 O2



CM 5

CRN 96-33-3

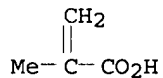
CMF C4 H6 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2

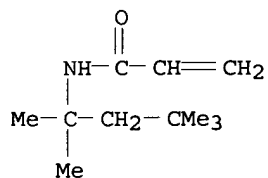


RN 395643-12-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate, sodium ethenesulfonate and N-(1,1,3,3-tetramethylbutyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 4223-03-4  
 CMF C11 H21 N O



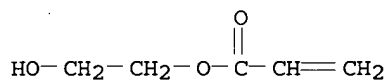
CM 2

CRN 3039-83-6  
 CMF C2 H4 O3 S . Na



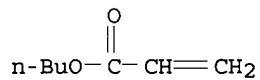
CM 3

CRN 818-61-1  
 CMF C5 H8 O3



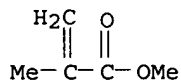
CM 4

CRN 141-32-2  
 CMF C7 H12 O2



CM 5

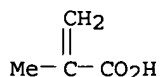
CRN 80-62-6  
 CMF C5 H8 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



- IC ICM C09J133-00  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 35
- ST acrylate emulsion polymer water resistant **pressure sensitive adhesive** compn; polyurethane dispersion humidity resistant **pressure sensitive adhesive** compn; **surfactant** emulsion polymn adhesive prepn peel shear property
- IT Urethane rubber, uses  
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (Bayhydrol PR 240 and Luphen D 200A, dispersing agent; in water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT Polyurethanes, uses  
 RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (dispersing agent; in water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT Polymerization  
 (emulsion, multistage; for prepn. of prepn. of emulsion polymers in water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT **Adhesives**  
 (emulsions, **pressure-sensitive**; water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT **Surfactants**  
 (for prepn. of prepn. of emulsion polymers in water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT Dispersing agents  
 (in water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT **Adhesives**  
 (peelable, **pressure-sensitive**; water- and humidity-resistant **pressure sensitive adhesive** compns.)
- IT Polyoxyalkylenes, uses

- RL: NUU (Other use, unclassified); USES (Uses)  
(sulfo-terminated, **surfactants**; for prepns. of  
prepns. of emulsion polymers in water- and humidity-resistant  
**pressure sensitive adhesive**  
compsns.)
- IT Adhesives  
(water-resistant; water- and humidity-resistant  
**pressure sensitive adhesive**  
compsns.)
- IT 101964-24-3, Witcobond W 290H 174515-03-8, QW 18-1  
199343-64-1, Bayhydrol DLN 396091-83-1, QW 28 396091-93-3, QW  
16-1 396092-15-2, Luphen D-DS 3459  
RL: PEP (Physical, engineering or chemical process); POF (Polymer  
in formulation); PRP (Properties); PYP (Physical process); TEM  
(Technical or engineered material use); PROC (Process); USES  
(Uses)  
(dispersing agent; in water- and humidity-resistant  
**pressure sensitive adhesive**  
compsns.)
- IT 25230-94-8P, Butyl acrylate-2-hydroxyethyl acrylate-  
**methacrylic acid-methyl methacrylate copolymer**  
395643-11-5P, Butyl acrylate-2-hydroxyethyl acrylate-  
**methacrylic acid-methyl acrylate-sodium**  
vinylsulfonate-N-tert-octylacrylamide copolymer  
395643-12-6P, Butyl acrylate-2-hydroxyethyl acrylate-  
**methacrylic acid-methyl methacrylate-sodium**  
vinylsulfonate-N-tert-octylacrylamide copolymer  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or  
chemical process); POF (Polymer in formulation); PRP (Properties);  
PYP (Physical process); TEM (Technical or engineered material  
use); PREP (Preparation); PROC (Process); USES (Uses)  
(prepns. of emulsion polymers for water- and humidity-resistant  
**pressure sensitive adhesive**  
compsns.)
- IT 577-11-7, Aerosol OT 75PG 2373-38-8, Aerosol MA 80I 9051-57-4,  
Aerosol NPES 930 14933-03-0, Emcol K 8300 38916-42-6, Aerosol  
22 396092-16-3, Witcolate D 51-53  
RL: NUU (Other use, unclassified); USES (Uses)  
(**surfactant**; prepns. of emulsion polymers for water-  
and humidity-resistant **pressure sensitive**  
**adhesive** compsns.)

L227 ANSWER 21 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:23627 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 136:71023  
TITLE: Peelable **pressure-sensitive**  
acrylic **adhesives** and their adhesive  
sheets for surface protection  
INVENTOR(S): Yamanaka, Takeshi; Tosaki, Hiroshi; Sudo,  
Takeshi; Miyoshi, Isamu; Shibata, Kenichi  
PATENT ASSIGNEE(S): Nitto Denko Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002003808	A2	20020109	JP 2000-196258	

PRIORITY APPLN. INFO.:

JP 2000-196258

2000  
06262000  
0626

AB The sheets have layers of the adhesives containing (A) 100 parts water-dispersing copolymers prepared by polymerizing mixts. of CH<sub>2</sub>:CR<sub>1</sub>CO<sub>2</sub>R<sub>2</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>2</sub>-14 alkyl) 50-99.9, HO<sub>2</sub>C-containing monomers 0.1-5, and other monomers 0-49.9% with 0.1-6 parts (on 100 parts of the monomers) nonionic and/or anionic **surfactants** bearing copolymerizable C:C in aqueous media containing, (B) 0.1-3 parts hinderedamine-based light stabilizers, and optionally (C) 0.1-3 parts benzotriazole-based UV absorbers. The adhesives may further contain (D) water-soluble **crosslinking** agents bearing oxazoline groups 0.1-5 equiv per 1 equiv of the carboxyl in the copolymers. Thus, 100 parts of a 59:40:1 Bu acrylate/Bu methacrylate/**acrylic acid** mixture was emulsion-polymerized in water with 0.4 part polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether (I) and 0.2 part I monosulfate ammonium salt, then treated with aqueous NH<sub>3</sub> to adjust the pH to 8. A LDPE film applied with an adhesive comprising the obtained polymer emulsion 100 (solid), Tinuvin 770 (light stabilizer) 2, and Epocros WS 500 (**crosslinker**) 1 part exhibited proper initial adhesion to SUS 430BA plate and was peelable from it without leaving the adhesive after 500 h in a weather-o-meter.

IT 383369-05-9P, **Acrylic acid**-butyl acrylate-butyl methacrylate-Epocros WS 500-polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether-polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether monosulfate ammonium salt copolymer  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)

RN 383369-05-9 HCAPLUS

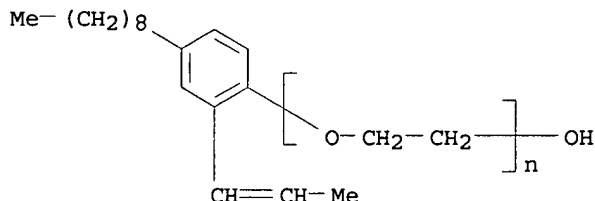
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole, α-[4-nonyl-2-(1-propenyl)phenyl]-ω-hydroxypoly(oxy-1,2-ethanediyl), 2-propenoic acid and α-sulfo-ω-[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt (9CI)  
 (CA INDEX NAME)

CM 1

CRN 146847-27-0

CMF (C<sub>2</sub> H<sub>4</sub> O)<sub>n</sub> C<sub>18</sub> H<sub>28</sub> O

CCI PMS

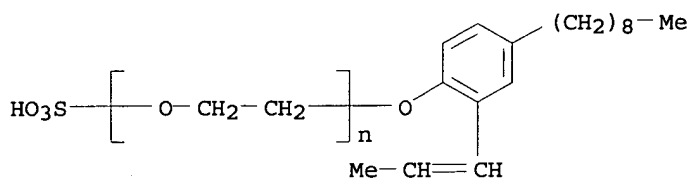


CM 2

CRN 140651-97-4

CMF (C2 H4 O)<sub>n</sub> C18 H28 O4 S . H3 N

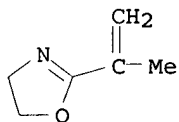
CCI PMS



CM 3

CRN 10471-78-0

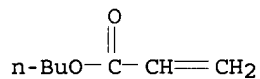
CMF C6 H9 N O



CM 4

CRN 141-32-2

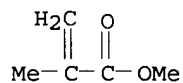
CMF C7 H12 O2



CM 5

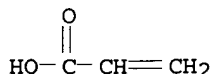
CRN 80-62-6

CMF C5 H8 O2



CM 6

CRN 79-10-7  
CMF C3 H4 O2



- IC ICM C09J133-06  
ICS C09J007-02
- CC 38-3 (Plastics Fabrication and Uses)
- ST acrylic emulsion peelable **pressure sensitive adhesive**; reactive emulsifier acrylic polymer prepn adhesive; metal plate surface protection adhesive sheet
- IT UV stabilizers  
(benzotriazoles; peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)
- IT Light stabilizers  
(hindered amines; peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)
- IT **Adhesives**  
(peelable, **pressure-sensitive**; peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)
- IT **Adhesives**  
(**pressure-sensitive**, sheets; peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)
- IT 3864-99-1, Tinuvin 327  
RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(UV absorber; peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)
- IT 52829-07-9, Tinuvin 770 71878-19-8, Chimassorb 944FD  
RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(light stabilizer; peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)
- IT 383369-05-9P, **Acrylic acid-butyl acrylate-butyl methacrylate-Epocros WS 500-polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether-polyethylene glycol 2-(1'-propenyl)-4-nonylphenyl monoether monosulfate ammonium salt copolymer**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(peelable **pressure-sensitive acrylic adhesives** for weather-resistant surface protection sheets)

L227 ANSWER 22 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:886393 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 136:7740  
TITLE: Synthetic resin emulsion and their aqueous primer compositions for recoating  
INVENTOR(S): Suzuki, Hideyuki  
PATENT ASSIGNEE(S): Clariant International Ltd., Switz.  
SOURCE: PCT Int. Appl., 33 pp.

DOCUMENT TYPE: CODEN: PIXXD2  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: Japanese  
 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001092432	A1	20011206	WO 2001-JP4667	2001 0601
W: US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
JP 2001342219	A2	20011211	JP 2000-164663	2000 0601
EP 1236781	A1	20020904	EP 2001-934506	2001 0601
EP 1236781	B1	20040908		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2003114587	A1	20030619	US 2002-48089	2002 0627
PRIORITY APPLN. INFO.: JP 2000-164663 A 2000 0601				
WO 2001-JP4667 W 2001 0601				

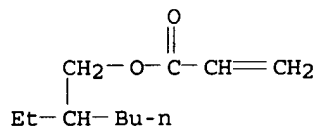
AB Title emulsions contain resin particles prepared from alkyl (meth)acrylates (containing  $\geq 50\%$  C<sub>4</sub> alkyl ones) 20-99.5, ethylenic unsatd. acids 0.5-10, and other monomers 0-79.5% in presence of alkyl diphenyl ether disulfonates and having average diameter of 0.01-0.2  $\mu$ m and glass-transition temperature (T<sub>g</sub>) of 15-50°. An acrylic/vinyl acetate-type coating-coated slate plate was left at 50° for 3 days, coated with an emulsion containing 0.09- $\mu$ m 28:225:210:315 acrylic acid (80%)-Bu acrylate-Me methacrylate-styrene copolymer (prepared in the presence of Dowfax 2A1) with T<sub>g</sub> 36°, and dried at room temperature to form a plate with good adhesion to various com. elastic coatings even after soaking in water for 3 days.

IT 25085-19-2P, Acrylic acid-2-ethylhexyl acrylate-styrene copolymer 27306-39-4P, Acrylic acid-butyl acrylate-methyl methacrylate-styrene copolymer 63103-09-3P, Acrylic acid-butyl acrylate-glycidyl methacrylate-methyl methacrylate-styrene copolymer 166304-77-4P, 2-Acetoacetoxyethyl methacrylate-acrylic acid-butyl acrylate-methyl methacrylate-styrene copolymer 376600-20-3P, Acrylic acid-butyl acrylate-methacrylic acid-methacrylamidoethyl ethyleneurea-methyl methacrylate copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (low alkyl (meth)acrylate- and styrene-based resin emulsions for aqueous primers with recoatability)

RN 25085-19-2 HCAPLUS  
CN 2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl  
2-propenoate (9CI) (CA INDEX NAME)

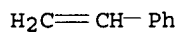
CM 1

CRN 103-11-7  
CMF C11 H20 O2



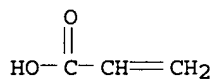
CM 2

CRN 100-42-5  
CMF C8 H8



CM 3

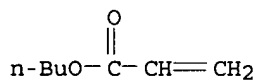
CRN 79-10-7  
CMF C3 H4 O2



RN 27306-39-4 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX  
NAME)

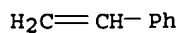
CM 1

CRN 141-32-2  
CMF C7 H12 O2

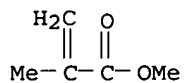


CM 2

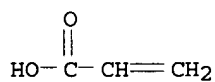
CRN 100-42-5  
CMF C8 H8



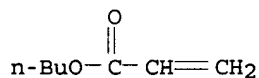
CM 3

 CRN 80-62-6  
 CMF C5 H8 O2


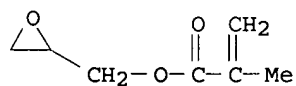
CM 4

 CRN 79-10-7  
 CMF C3 H4 O2

 RN 63103-09-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate  
 and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

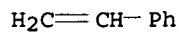
 CRN 141-32-2  
 CMF C7 H12 O2


CM 2

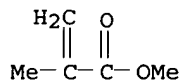
 CRN 106-91-2  
 CMF C7 H10 O3


CM 3

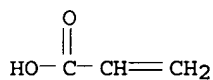
 CRN 100-42-5  
 CMF C8 H8



CM 4

 CRN 80-62-6  
 CMF C5 H8 O2


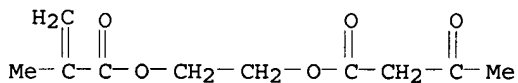
CM 5

 CRN 79-10-7  
 CMF C3 H4 O2


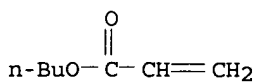
RN 166304-77-4 HCAPLUS

 CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl  
 ester, polymer with butyl 2-propenoate, ethenylbenzene, methyl  
 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

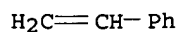
 CRN 21282-97-3  
 CMF C10 H14 O5


CM 2

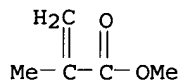
 CRN 141-32-2  
 CMF C7 H12 O2


CM 3

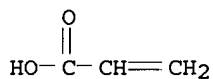
 CRN 100-42-5  
 CMF C8 H8



CM 4

CRN 80-62-6  
CMF C5 H8 O2

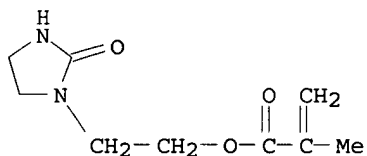
CM 5

CRN 79-10-7  
CMF C3 H4 O2

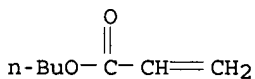
RN 376600-20-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,  
2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and  
2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3

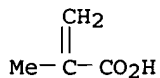
CM 2

CRN 141-32-2  
CMF C7 H12 O2

CM 3

CRN 79-41-4

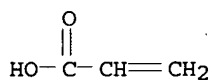
CMF C4 H6 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09D133-06  
 ICS C09D123-28; C09D005-00; C09D005-02; C08L033-06; B05D007-24  
 CC 42-7 (Coatings, Inks, and Related Products)  
 IT **25085-19-2P**, Acrylic acid-2-ethylhexyl acrylate-styrene  
 copolymer **27306-39-4P**, Acrylic acid-butyl  
 acrylate-methyl methacrylate-styrene copolymer **63103-09-3P**  
 , Acrylic acid-butyl acrylate-glycidyl methacrylate-methyl  
 methacrylate-styrene copolymer **166304-77-4P**,  
 2-Acetoacetoxyethyl methacrylate-acrylic acid-butyl  
 acrylate-methyl methacrylate-styrene copolymer  
**376600-20-3P**, Acrylic acid-butyl acrylate-methacrylic  
 acid-methacrylamidoethyl ethyleneurea-methyl methacrylate  
 copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (low alkyl (meth)acrylate- and styrene-based resin emulsions  
 for aqueous primers with recoatability)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 23 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:747865 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 135:273382  
 TITLE: Hydrophilic polymers, **pressure**  
 -sensitive **adhesives** and coatings  
 INVENTOR(S): Holguin, Daniel L.; Barker, H. Paul; Lee, Ivan  
 S. P.; Lin, Kenneth S.  
 PATENT ASSIGNEE(S): Avery Dennison Corporation, USA  
 SOURCE: PCT Int. Appl., 92 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
----- -----	----	-----	-----	
WO 2001074917	A1	20011011	WO 2001-US10036	2001

0330

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6706836 B1 20040316 US 2000-540252 2000 0331

US 2001037006 A1 20011101 US 2001-757980 2001 0110

US 6653427 B2 20031125 2001 0330

CA 2403661 AA 20011011 CA 2001-2403661

EP 1274750 A1 20030115 EP 2001-926469 2001 0330

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003529648 T2 20031007 JP 2001-572604 2001 0330

PRIORITY APPLN. INFO.: US 2000-540252 A 2000 0331

US 2001-757980 A 2001 0110

WO 2001-US10036 W 2001 0330

AB Gel-free hydrophilic polymers (e.g. homo- or copolymers of hydroxyethyl acrylate or hydroxybutyl acrylate low in impurities) are prepared without chain transfer agent in alc., in H<sub>2</sub>O, and in solns. of alc. and H<sub>2</sub>O. The polymers are useful as hydrophilic **pressure-sensitive adhesives**, coatings, hydrogels, films, topical compns., cosmetic compns., transdermal drug delivery systems, and carrier for a mucus membrane drug delivery systems. Thus, 2-hydroxyethyl methacrylate having <3% alkylene glycol methacrylate impurities and 0.05-0.1% crosslinker impurities was polymerized in EtOH.

IT 364051-78-5P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(core shell; hydrophilic polymers for **pressure** -sensitive **adhesives** and coatings)

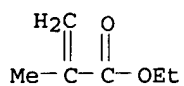
RN 364051-78-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and trifluoroethyl 2-methyl-2-propenoate, graft (9CI)

(CA INDEX NAME)

CM 1

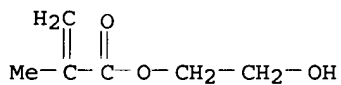
CRN 38785-10-3  
CMF C6 H7 F3 O2  
CCI IDS



3 ( D1-- F )

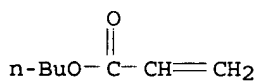
CM 2

CRN 868-77-9  
CMF C6 H10 O3



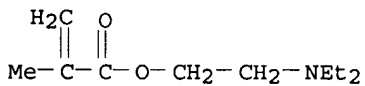
CM 3

CRN 141-32-2  
CMF C7 H12 O2



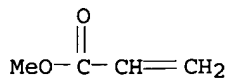
CM 4

CRN 105-16-8  
CMF C10 H19 N O2



CM 5

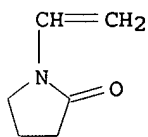
CRN 96-33-3  
CMF C4 H6 O2



CM 6

CRN 88-12-0

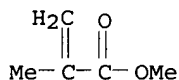
CMF C6 H9 N O



CM 7

CRN 80-62-6

CMF C5 H8 O2



- IC ICM C08F020-26  
ICS C08F216-04; C08F220-20; B05D003-00; A61K009-16
- CC 35-4 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 38, 42
- ST gel free polyhydroxyethyl methacrylate prepn use; **pressure**  
sensitive **adhesive** polyhydroxyethyl methacrylate
- IT Coating materials  
(abrasion-resistant; hydrophilic polymers for **pressure**  
-sensitive **adhesives** and coatings)
- IT Drug delivery systems  
(carriers; hydrophilic polymers for **pressure**  
-sensitive **adhesives** and coatings and)
- IT Cosmetics  
Hydrogels  
(hydrophilic polymers for **pressure**-sensitive  
**adhesives** and coatings and)
- IT **Adhesives**  
(**pressure**-sensitive; hydrophilic polymers for  
**pressure**-sensitive **adhesives** and coatings)
- IT Drug delivery systems  
(topical; hydrophilic polymers for **pressure**-sensitive  
**adhesives** and coatings and)
- IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(with hydrophilic polymers for **pressure**-sensitive  
**adhesives**)
- IT 364051-77-4P **364051-78-5P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); USES (Uses)  
(core shell; hydrophilic polymers for **pressure**

-sensitive **adhesives** and coatings)  
 IT 25249-16-5P, Poly(2-hydroxyethyl methacrylate) 27175-46-8P,  
 Acrylic acid-2-hydroxyethyl methacrylate copolymer 29086-87-1P,  
 Poly(4-hydroxybutyl acrylate) 31693-08-0P, 2-Hydroxyethyl  
 methacrylate-methacrylic acid copolymer 39990-17-5P,  
 4-Hydroxybutyl acrylate-2-hydroxyethyl methacrylate copolymer  
 364051-79-6P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
 or engineered material use); PREP (Preparation); USES (Uses)  
 (hydrophilic polymers for **pressure-sensitive**  
**adhesives** and coatings)  
 IT 25322-68-3, Polyethylene glycol  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (with hydrophilic polymers for **pressure-sensitive**  
**adhesives**)  
 REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 24 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:564928 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 135:138444  
 TITLE: Multilayer composite product comprising a  
 pressure-sensitive and heat-resistant adhesive  
 polymer layer with good balance of creep and  
 heat resistance  
 INVENTOR(S): Court, Francois; Laurichesse, Christian;  
 Verge, Christophe  
 PATENT ASSIGNEE(S): ATOFINA, Fr.  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001054896	A2	20010802	WO 2001-FR222	2001 0124
WO 2001054896	A3	20020131		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2804369	A1	20010803	FR 2000-1146	2000 0128
FR 2804369	B1	20020419		
PRIORITY APPLN. INFO.:			FR 2000-1146	A 2000 0128

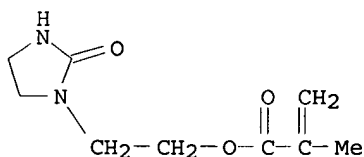
AB The invention concerns a multilayer composite product comprising at least once successively a first soft or rigid material layer; a second layer consisting of a **pressure-sensitive adhesive** polymeric film formed by applying on the first layer at least a latex (L1), then by drying said latex; and a third layer consisting of a soft or rigid material, a latex (L1) obtained by emulsion polymerization of the mixture of the following monomers, for 100%: 40-95% of at least a (meth)acrylic or vinyl monomer capable of resulting in a homopolymer having a  $T_g \leq -40^\circ$ ; 2-50% of at least a (meth)acrylic or vinyl monomer capable of resulting in a homopolymer having a  $T_g \geq 0^\circ$ ; 1-6% of at least a (meth)acrylic carboxylic monomer; 0-5% of at least (meth)acrylic monomer ethoxylated with 1-20% ethylene oxide mol; 0.075-5% of at least a (meth)acrylic or vinyl monomer comprising a ureido group; and 0-2% of at least an acrylic or vinyl monomer bearing a sulfonate function.

IT 352231-27-7P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (latex; multilayer composite product comprising a pressure-sensitive and temperature-resistant adhesive polymer layer)

RN 352231-27-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-hydroxyethyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

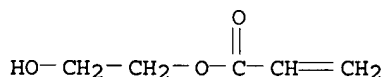
CM 1

CRN 86261-90-7  
 CMF C9 H14 N2 O3



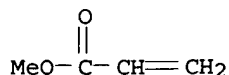
CM 2

CRN 818-61-1  
 CMF C5 H8 O3

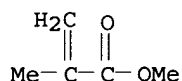


CM 3

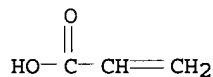
CRN 96-33-3  
 CMF C4 H6 O2



CM 4

CRN 80-62-6  
CMF C5 H8 O2

CM 5

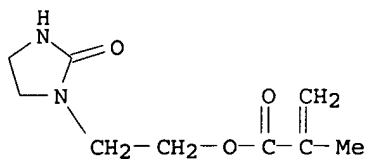
CRN 79-10-7  
CMF C3 H4 O2

IC ICM B32B007-12  
ICS C09J133-06; B32B025-14  
CC 38-3 (Plastics Fabrication and Uses)  
ST **adhesive pressure** sensitive heat resistant  
composite multilayer; creep **adhesive** property  
**pressure** sensitive **adhesive** composite  
IT **Adhesives**  
(heat-resistant, **pressure**-sensitive; multilayer  
composite product comprising a pressure-sensitive and  
temperature-resistant adhesive polymer layer)  
IT **Adhesives**  
(**pressure**-sensitive, heat-resistant; multilayer  
composite product comprising a pressure-sensitive and  
temperature-resistant adhesive polymer layer)  
IT **352231-27-7P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); USES (Uses)  
(latex; multilayer composite product comprising a  
pressure-sensitive and temperature-resistant adhesive polymer layer)

L227 ANSWER 25 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:472844 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 135:77890  
TITLE: Dissolvable **pressure**-sensitive  
**adhesives**  
INVENTOR(S): Su, Shiao-nung J.; Akeley, James P.  
PATENT ASSIGNEE(S): Avery Dennison Corporation, USA  
SOURCE: PCT Int. Appl., 32 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

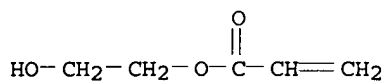
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046329	A1	20010628	WO 2000-US31730	2000 1120
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6525129	B1	20030225	US 1999-469149	1999 1220
EP 1242555	A1	20020925	EP 2000-978799	2000 1120
EP 1242555	B1	20050316		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			US 1999-469149	A 1999 1220
			WO 2000-US31730	W 2000 1120
AB	A dissolvable <b>pressure-sensitive adhesive</b> comprises an emulsion acrylic copolymer formed from a plurality of monomers comprising an alkyl (meth) <b>acrylate</b> , an N-vinyl lactam monomer, and at least one hydroxy-containing (meth) <b>acrylate</b> ester, and preferably at least one modifying monomer. The copolymer is preferably blended with one or more post-additive, selected from surfactants, plasticizers, and mineral salts to enhance its dissolvability. Preferably the copolymer has a weight-average mol. weight less than about 120,000.			
IT	<b>346467-22-9P</b> RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (dissolvable <b>pressure-sensitive adhesives</b> )			
RN	346467-22-9 HCAPLUS			
CN	2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)			
CM	1			
CRN	86261-90-7			
CMF	C9 H14 N2 O3			



CM 2

CRN 818-61-1

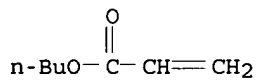
CMF C5 H8 O3



CM 3

CRN 141-32-2

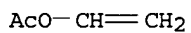
CMF C7 H12 O2



CM 4

CRN 108-05-4

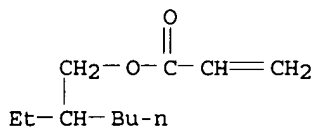
CMF C4 H6 O2



CM 5

CRN 103-11-7

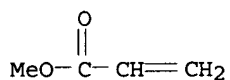
CMF C11 H20 O2



CM 6

CRN 96-33-3

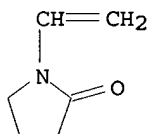
CMF C4 H6 O2



CM 7

CRN 88-12-0

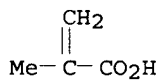
CMF C6 H9 N O



CM 8

CRN 79-41-4

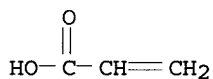
CMF C4 H6 O2



CM 9

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09J133-06  
 ICS C08F220-12; C08F220-12; C08F220-28; C08F226-06; C08F002-22  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST **pressure sensitive adhesive** dissolvable acrylic  
 IT Alcohols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C12-14, ethoxylated, Disponil A 1080; dissolvable **pressure-sensitive adhesives**)  
 IT Surfactants  
 (dissolvable **pressure-sensitive adhesives**)  
 IT Plasticizers  
 (polymeric; dissolvable **pressure-sensitive adhesives**)  
 IT **Adhesives**  
 (pressure-sensitive; dissolvable **pressure-sensitive adhesives**)

IT 346467-22-9P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (dissolvable **pressure-sensitive adhesives**)  
 IT 631-61-8, Ammonium acetate 9014-90-8 9051-57-4, Alipal CO 436  
 346587-94-8, Stepan 1861-68 346588-09-8, Plasthall P 900  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (dissolvable **pressure-sensitive adhesives**)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 26 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:453182 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 135:47673  
 TITLE: Internally plasticized and low VOC latex

compositions, ethyleneically unsaturated  
 carboxylate monomer, and their coating,  
 adhesive or ink applications  
 INVENTOR(S): Thames, Shelby Freland; Wang, Zhiyu;  
 Hariharan, Rajan; Panjnani, Kamlesh Gopichand;  
 Brister, Elizabeth H.; King, Corey L.  
 PATENT ASSIGNEE(S): University of Southern Mississippi, USA  
 SOURCE: PCT Int. Appl., 62 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044380	A2	20010621	WO 2000-US33577	2000 1211
WO 2001044380	A3	20011213		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6624223	B1	20030923	US 1999-460946	1999 1214
PRIORITY APPLN. INFO.:			US 1999-460946	A 1999 1214
			US 1996-773741	A2 1996 1224

OTHER SOURCE(S): MARPAT 135:47673  
 AB Novel latex or emulsion compns. containing internally plasticizing and

**crosslinkable** monomers are derived from traditional semi-drying or nondrying oils. The monomers are ethylenically unsatd. esters of long-chain olefinic compds. Latex are formed from acrylate or methacrylate esters of hydroxy fatty acid esters derived from castor oil or lesquerella oil. The synthesis of the latex composition involves (a) an esterification reaction of ethylenically unsatd. carboxylic acid or its derivs. with a substituted hydroxy long-chain olefinic compound, (b) subsequent polymerization of the so formed ethylenically unsatd. ester of a long-chain olefinic compound in an aqueous phase with  $\geq 1$  other copolymerizable monomer, and (c) blending with  $\geq 1$  drier and a **surfactant**. These compns. form films at low min. film forming temps. (MFT)  $-5$  to  $10^\circ$  and cure to above ambient glass transition ( $T_g$ ) polymers without the use of traditional organic cosolvents which contribute to environmental pollution via volatile organic compds. (VOCs) emissions. These compns. are useful in waterborne coatings, contact and **pressure sensitive adhesives**, and inks. Coating films utilizing Bu acrylate-Me methacrylate-acrylated Me ricinoleate (10%) copolymer (preparation given) showed tan  $\delta$  temperature  $24.3^\circ$ , scrub resistance (ML 200) 186, and 8 wk blocking resistance  $7.5$ ; vs.  $17.5^\circ$ , 563, and  $1.0$ , resp., using Bu acrylate-Me methacrylate-**methacrylic acid** copolymer latex.

IT 219696-90-9P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(latex; low min. film forming temperature and high  $T_g$ , internally plasticizing, and low VOC latex coating compns.)

RN 219696-90-9 HCAPLUS

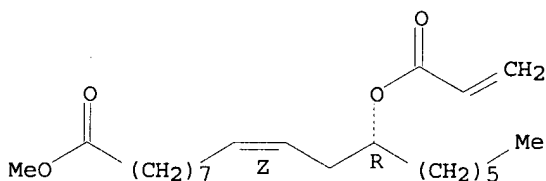
CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 14202-22-3

CMF C22 H38 O4

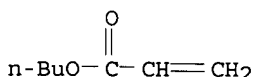
Absolute stereochemistry.  
Double bond geometry as shown.



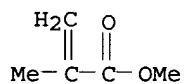
CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 80-62-6  
CMF C5 H8 O2

IT 330197-59-6P 330197-63-2P 330197-65-4P

330197-68-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

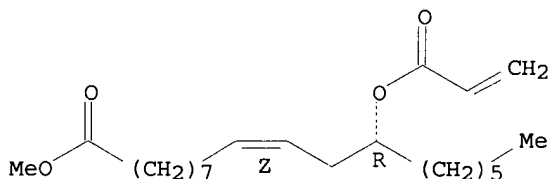
RN 330197-59-6 HCAPLUS

CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxyl]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

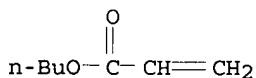
CM 1

CRN 14202-22-3  
CMF C22 H38 O4

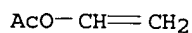
Absolute stereochemistry.  
Double bond geometry as shown.



CM 2

CRN 141-32-2  
CMF C7 H12 O2

CM 3

CRN 108-05-4  
CMF C4 H6 O2

RN 330197-63-2 HCAPLUS

CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenyl acetate, ethenyl tert-decanoate, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

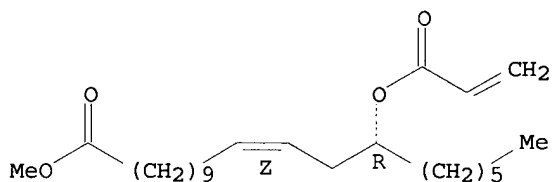
CM 1

CRN 330197-62-1

CMF C24 H42 O4

Absolute stereochemistry.

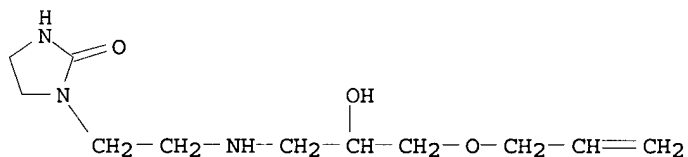
Double bond geometry as shown.



CM 2

CRN 85356-84-9

CMF C11 H21 N3 O3

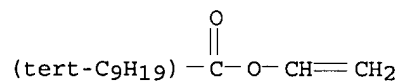


CM 3

CRN 26544-09-2

CMF C12 H22 O2

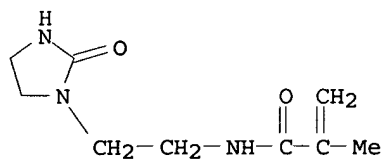
CCI IDS



CM 4

CRN 3089-19-8

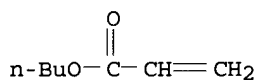
CMF C9 H15 N3 O2



CM 5

CRN 141-32-2

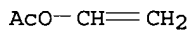
CMF C7 H12 O2



CM 6

CRN 108-05-4

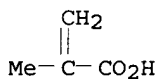
CMF C4 H6 O2



CM 7

CRN 79-41-4

CMF C4 H6 O2



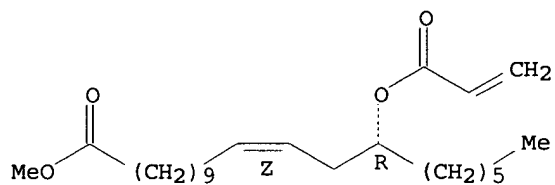
RN 330197-65-4 HCAPLUS  
 CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester,  
 (11Z,14R)-, polymer with butyl 2-propenoate, ethenylbenzene,  
 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-  
 imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-  
 propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1

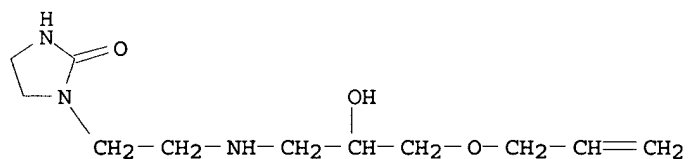
CMF C24 H42 O4

Absolute stereochemistry.  
 Double bond geometry as shown.



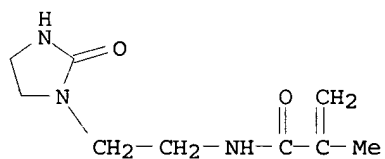
CM 2

CRN 85356-84-9  
 CMF C11 H21 N3 O3



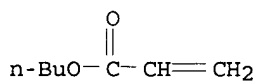
CM 3

CRN 3089-19-8  
 CMF C9 H15 N3 O2



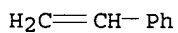
CM 4

CRN 141-32-2  
 CMF C7 H12 O2

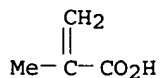


CM 5

CRN 100-42-5  
 CMF C8 H8



CM 6

CRN 79-41-4  
CMF C4 H6 O2

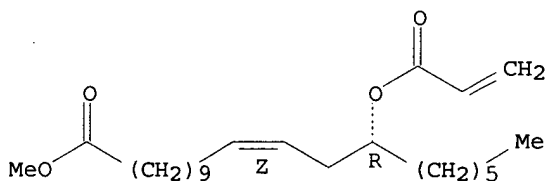
RN 330197-68-7 HCAPLUS

CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, 2-hydroxy-1-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, methyl 2-methyl-2-propenoate, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide, 2-methyl-2-propenoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

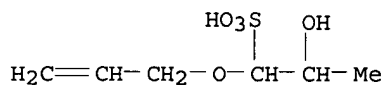
CM 1

CRN 330197-62-1  
CMF C24 H42 O4

Absolute stereochemistry.  
Double bond geometry as shown.



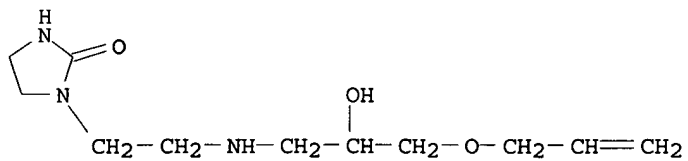
CM 2

CRN 143187-46-6  
CMF C6 H12 O5 S . Na

● Na

CM 3

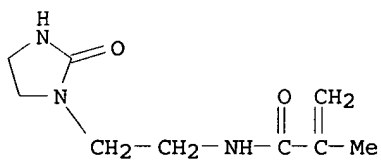
CRN 85356-84-9  
CMF C11 H21 N3 O3



CM 4

CRN 3089-19-8

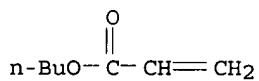
CMF C9 H15 N3 O2



CM 5

CRN 141-32-2

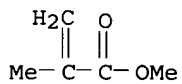
CMF C7 H12 O2



CM 6

CRN 80-62-6

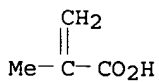
CMF C5 H8 O2



CM 7

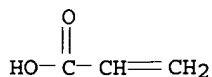
CRN 79-41-4

CMF C4 H6 O2



CM 8

CRN 79-10-7  
CMF C3 H4 O2

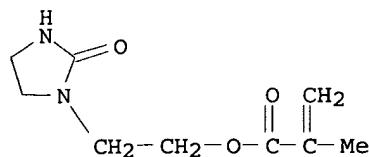


IC ICM C09D004-02  
ICS C09D011-06; C09J004-02; C07C069-732  
CC 42-7 (Coatings, Inks, and Related Products)  
IT **Adhesives**  
(pressure-sensitive; low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)  
IT **219696-90-9P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(latex; low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)  
IT 108-05-4DP, Vinyl acetate, polymer with Bu acrylate and castor oil methacrylate 141-32-2DP, Butyl acrylate, polymer with vinyl acetate and castor oil methacrylate 85356-84-9DP, Sipomer WAM, polymer with acrylate, and lesquerella oil acrylate 98716-57-5P, Methyl ricinoleate methacrylate-vinyl acetate copolymer  
**330197-59-6P 330197-63-2P 330197-65-4P**  
**330197-68-7P 330197-70-1P**  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

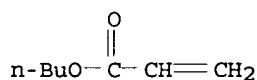
L227 ANSWER 27 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:319420 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 134:326931  
TITLE: Multistage emulsion polymer and coatings containing it  
INVENTOR(S): Pakusch, Joachim; Dittrich, Uwe; Roeckel, Harald; Smith, Alan; Gulbins, Erich; Zhuo, Li  
PATENT ASSIGNEE(S): BASF A.-G., Germany  
SOURCE: Ger. Offen., 20 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19952671	A1	20010503	DE 1999-19952671	1999 1102
US 6552116	B1	20030422	US 2000-703875	2000 1102
PRIORITY APPLN. INFO.:			DE 1999-19952671	A 1999 1102

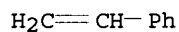
- AB An emulsion polymer, useful as a binder in high-gloss paints, comprises a first domain having a glass-transition temperature (Tg) from -10° to +40° and a second domain having a Tg of 50-120°, whereby the weight ratio of the first to the second domain is 90:10 to 50:50, the first domain incorporates polymerized units of (a) Me and/or Et **methacrylate** 5-60, (b) C4-12-alkyl **acrylate**(s) 20-80, (c) vinylarom. compds. 0-50, (d) ethylenically unsatd. carboxylic acids 0.01-5, (e) ethylenically unsatd. amides 0-5, and (f) other ethylenically unsatd. monomers 0-10 weight% and the second domain incorporates polymerized units of (a) Me and/or Et **methacrylate** 0-99.9, (b) vinylarom. compds. and/or C4-12-alkyl **methacrylate** (s) 0-99.9, (c) ethylenically unsatd. carboxylic acids 0.1-5, (d) ethylenically unsatd. amides 0-10, and (e) other ethylenically unsatd. monomers 0-10 weight%, provided that at least one of the domains contains 0.1-10 weight% of a N-containing linking monomer (especially ureidoethyl **methacrylate**) and that (1) the first domain contains ≥10 weight% vinylarom. monomer and/or (2) the second domain contains ≥15 weight% vinylarom. monomer and/or C4-12-alkyl **methacrylate**. Thus, in a first stage acrylamide 2.00, acrylic acid 3.75, N-(2-methacryloyloxyethyl)ethyleneurea 10.00, Me **methacrylate** 100.00, styrene 70.00, and Bu **acrylate** 190.00 g were polymerized with Na2S2O8 in an aqueous dispersion of 12.50 g polystyrene seed crystals at 85° and in a second stage 120.50 g Me **methacrylate** and 3.75 g acrylic acid were added and copolyd., after which the polymer was neutralized with NH3 to give a polymer dispersion (48.9% solids) with pH 6.7 and average particle size 115 nm. This binder dispersion was mixed with a pigment paste (predominantly TiO2) and applied to a test panel and cured to give a coating with 60° gloss 84% and good adhesion.
- IT **135836-18-9P**, Acrylic acid-butyl **acrylate** -N-(2-methacryloyloxyethyl)ethyleneurea-methyl **methacrylate**-styrene copolymer **337367-52-9P** **337367-58-5P**, Acrylamide-acrylic acid-butyl **acrylate**-N-(2-methacryloyloxyethyl)ethyleneurea-styrene copolymer **337367-71-2P** **337367-84-7P**, Acrylamide-acrylic acid-butyl **acrylate** -N-(2-methacryloyloxyethyl)ethyleneurea-methyl **methacrylate** copolymer **337367-95-0P**, Acrylamide-butyl **acrylate**-methacrylic acid-N-(2-methacryloyloxyethyl)ethyleneurea-methyl **methacrylate**-styrene copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (core; multistage emulsion polymer as binder for glossy coatings)
- RN **135836-18-9** HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)
- CM 1
- CRN 86261-90-7
- CMF C9 H14 N2 O3



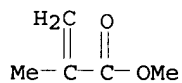
CM 2

CRN 141-32-2  
CMF C7 H12 O2

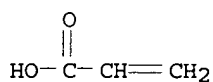
CM 3

CRN 100-42-5  
CMF C8 H8

CM 4

CRN 80-62-6  
CMF C5 H8 O2

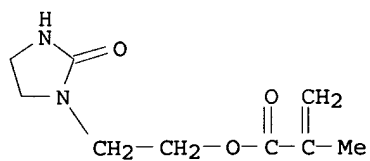
CM 5

CRN 79-10-7  
CMF C3 H4 O2

RN 337367-52-9 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, ethenylbenzene, 2-(2-oxo-1-imidazolidinyl)ethyl  
 2-methyl-2-propenoate, 2-propenamide and 2-propenoic acid (9CI)  
 (CA INDEX NAME)

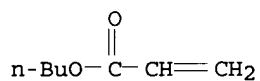
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



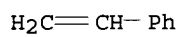
CM 2

CRN 141-32-2  
CMF C7 H12 O2



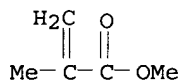
CM 3

CRN 100-42-5  
CMF C8 H8



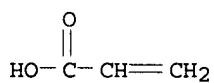
CM 4

CRN 80-62-6  
CMF C5 H8 O2



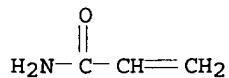
CM 5

CRN 79-10-7  
CMF C3 H4 O2



CM 6

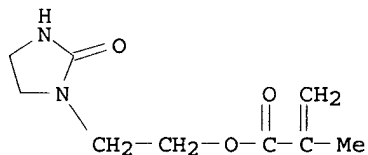
CRN 79-06-1  
CMF C3 H5 N O



RN 337367-58-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl  
ester, polymer with butyl 2-propenoate, ethenylbenzene,  
2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

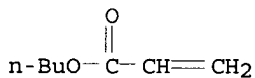
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



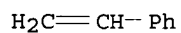
CM 2

CRN 141-32-2  
CMF C7 H12 O2



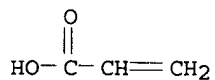
CM 3

CRN 100-42-5  
CMF C8 H8



CM 4

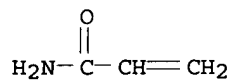
CRN 79-10-7  
CMF C3 H4 O2



CM 5

CRN 79-06-1

CMF C3 H5 N O



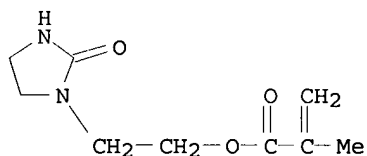
RN 337367-71-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

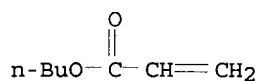
CMF C9 H14 N2 O3



CM 2

CRN 141-32-2

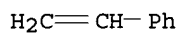
CMF C7 H12 O2



CM 3

CRN 100-42-5

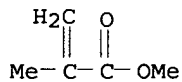
CMF C8 H8



CM 4

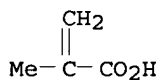
CRN 80-62-6

CMF C5 H8 O2



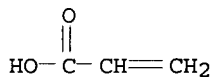
CM 5

CRN 79-41-4  
CMF C4 H6 O2



CM 6

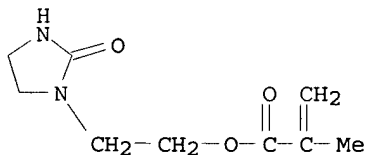
CRN 79-10-7  
CMF C3 H4 O2



RN 337367-84-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-  
propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX  
NAME)

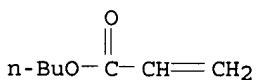
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3

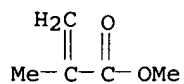


CM 2

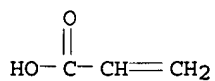
CRN 141-32-2  
CMF C7 H12 O2



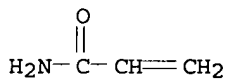
CM 3

CRN 80-62-6  
CMF C5 H8 O2

CM 4

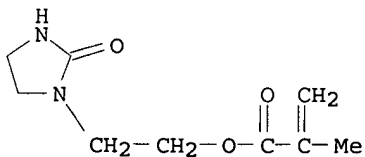
CRN 79-10-7  
CMF C3 H4 O2

CM 5

CRN 79-06-1  
CMF C3 H5 N O

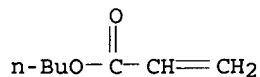
RN 337367-95-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenamide (9CI)  
(CA INDEX NAME)

CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3

CM 2

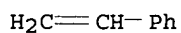
CRN 141-32-2  
CMF C7 H12 O2



CM 3

CRN 100-42-5

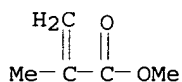
CMF C8 H8



CM 4

CRN 80-62-6

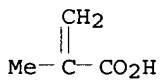
CMF C5 H8 O2



CM 5

CRN 79-41-4

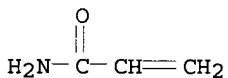
CMF C4 H6 O2



CM 6

CRN 79-06-1

CMF C3 H5 N O



IT 82930-89-0P, Acrylic acid-methyl **methacrylate** copolymer, ammonium salt 86609-74-7P, Acrylic acid-methyl **methacrylate**-styrene copolymer, ammonium salt 337367-62-1P 337367-68-7P 337367-76-7P 337367-81-4P 337367-89-2P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (shell; multistage emulsion polymer as binder for glossy coatings)  
 RN 82930-89-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25322-25-2

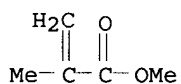
CMF (C5 H8 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 80-62-6

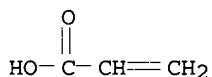
CMF C5 H8 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 86609-74-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
ethenylbenzene and 2-propenoic acid, ammonium salt (9CI) (CA  
INDEX NAME)

CM 1

CRN 25767-39-9

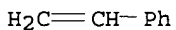
CMF (C8 H8 . C5 H8 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 100-42-5

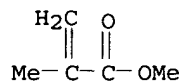
CMF C8 H8



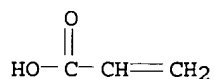
CM 3

CRN 80-62-6

CMF C5 H8 O2



CM 4

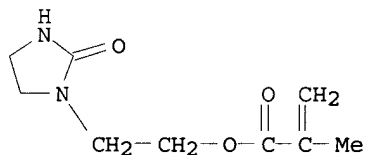
CRN 79-10-7  
CMF C3 H4 O2

RN 337367-62-1 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and  
2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

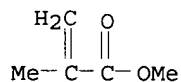
CM 1

CRN 337367-61-0  
CMF (C9 H14 N2 O3 . C5 H8 O2 . C3 H4 O2)x  
CCI PMS

CM 2

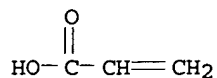
CRN 86261-90-7  
CMF C9 H14 N2 O3

CM 3

CRN 80-62-6  
CMF C5 H8 O2

CM 4

CRN 79-10-7  
CMF C3 H4 O2



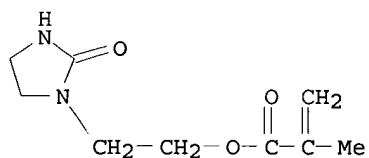
RN 337367-68-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 ethenylbenzene, 2-(2-oxo-1-imidazolidinyl)ethyl  
 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI)  
 (CA INDEX NAME)

CM 1

CRN 337367-67-6  
 CMF (C9 H14 N2 O3 . C8 H8 . C5 H8 O2 . C3 H4 O2)x  
 CCI PMS

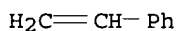
CM 2

CRN 86261-90-7  
 CMF C9 H14 N2 O3



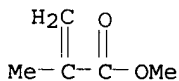
CM 3

CRN 100-42-5  
 CMF C8 H8



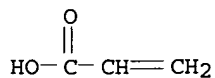
CM 4

CRN 80-62-6  
 CMF C5 H8 O2



CM 5

CRN 79-10-7  
 CMF C3 H4 O2



RN 337367-76-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl  
 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl  
 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI)  
 (CA INDEX NAME)

CM 1

CRN 337367-75-6

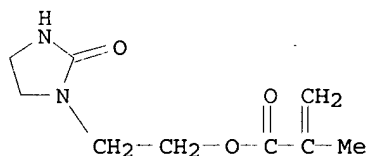
CMF (C9 H14 N2 O3 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 86261-90-7

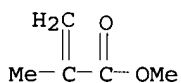
CMF C9 H14 N2 O3



CM 3

CRN 80-62-6

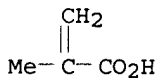
CMF C5 H8 O2



CM 4

CRN 79-41-4

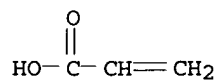
CMF C4 H6 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



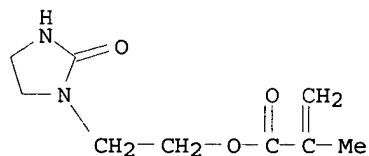
RN 337367-81-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, methyl  
 2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl  
 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI)  
 (CA INDEX NAME)

CM 1

CRN 337367-80-3  
 CMF (C9 H14 N2 O3 . C8 H8 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x  
 CCI PMS

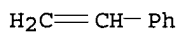
CM 2

CRN 86261-90-7  
 CMF C9 H14 N2 O3



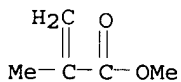
CM 3

CRN 100-42-5  
 CMF C8 H8



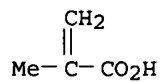
CM 4

CRN 80-62-6  
 CMF C5 H8 O2



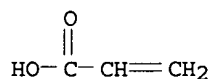
CM 5

CRN 79-41-4  
 CMF C4 H6 O2



CM 6

CRN 79-10-7  
CMF C3 H4 O2



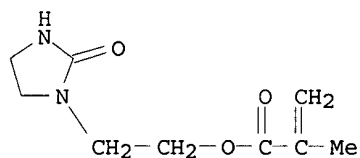
RN 337367-89-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with methyl  
2-methyl-2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl  
2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI)  
(CA INDEX NAME)

CM 1

CRN 337367-88-1  
CMF (C9 H14 N2 O3 . C8 H14 O2 . C5 H8 O2 . C3 H4 O2)x  
CCI PMS

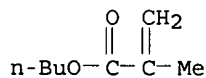
CM 2

CRN 86261-90-7  
CMF C9 H14 N2 O3



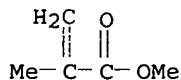
CM 3

CRN 97-88-1  
CMF C8 H14 O2

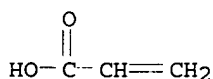


CM 4

CRN 80-62-6  
CMF C5 H8 O2



CM 5

CRN 79-10-7  
CMF C3 H4 O2

- IC ICM C08F220-18  
ICS C08F212-00; C08L033-04
- CC 35-5 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 42
- IT **135836-18-9P**, Acrylic acid-butyl **acrylate**  
-N-(2-methacryloyloxyethyl)ethyleneurea-methyl  
**methacrylate**-styrene copolymer **337367-52-9P**  
**337367-58-5P**, Acrylamide-acrylic acid-butyl  
**acrylate**-N-(2-methacryloyloxyethyl)ethyleneurea-styrene  
copolymer **337367-71-2P 337367-84-7P**,  
Acrylamide-acrylic acid-butyl **acrylate**  
-N-(2-methacryloyloxyethyl)ethyleneurea-methyl  
**methacrylate** copolymer **337367-95-0P**,  
Acrylamide-butyl **acrylate**-methacrylic  
acid-N-(2-methacryloyloxyethyl)ethyleneurea-methyl  
**methacrylate**-styrene copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(core; multistage emulsion polymer as binder for glossy  
coatings)
- IT 35209-54-2P, Acrylic acid-styrene copolymer, ammonium salt  
**82930-89-0P**, Acrylic acid-methyl **methacrylate**  
copolymer, ammonium salt **86609-74-7P**, Acrylic  
acid-methyl **methacrylate**-styrene copolymer, ammonium  
salt **337367-62-1P 337367-68-7P**  
**337367-76-7P 337367-81-4P 337367-89-2P**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(shell; multistage emulsion polymer as binder for glossy  
coatings)

L227 ANSWER 28 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:192564 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 134:239014  
TITLE: Low MFT and high Tg , internally plasticizing,  
and low VOC latex coating compositions  
INVENTOR(S): Thames, Shelby Freland; Panjnani, Kamlesh  
Gopichand; Hariharan, Rajan; Wang, Zhiyu  
PATENT ASSIGNEE(S): University of Southern Mississippi, USA  
SOURCE: U.S., 18 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6203720	B1	20010320	US 1996-773741	1996 1224
US 6624223	B1	20030923	US 1999-460946	1999 1214
US 2003045609	A1	20030306	US 2002-118586	2002 0408
US 6897257	B2	20050524		
PRIORITY APPLN. INFO.:			US 1996-773741	A2 1996 1224
			US 1999-460946	A2 1999 1214

AB Latex or emulsion compns. contain internally plasticizing and **crosslinkable** monomers derived from traditional semi-drying or nondrying oils. The monomers are ethylenically unsatd. esters of long-chain olefinic compds., preferably acrylate or methacrylate esters of hydroxy fatty acid esters derived from castor oil or lesquerella oil. The latex composition is made by (a) an esterification reaction of ethylenically unsatd. carboxylic acid or its derivs. with a substituted hydroxy long-chain olefinic compound, (b) subsequent polymerization of the ethylenically unsatd. ester of a long-chain olefinic compound in an aqueous phase with  $\geq 1$  other copolymerizable monomer, and (c) blending polymer with  $\geq 1$  drier and a **surfactant**. These compns. form films at low min. film forming temps. (MFT) -5 to 10° and cure to above ambient glass transition (Tg) without the use of traditional organic cosolvents which contribute to environmental pollution via volatile organic compds. (VOCs) emissions. These compns. are useful in waterborne coatings, contact and **pressure sensitive adhesives**, and inks. An ink formulation contained acrylated Me lesquerolate monomer (preparation given) 21.4, Fluorescent rocket red AX-135 1.0, Photomer 3016 17.0, Photomer 4061 19.0, Photomer 4094 15.6, Photomer 4149 4.4, Photomer 4770 5.5, Photomer 6008 11.2, Byk 065 0.4, Byk 358 0.3, Byk 325 0.3, Irgacure 651 2.7, and benzophenone 1.3 parts.

IT 330197-59-6P 330197-63-2P 330197-65-4P  
330197-68-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

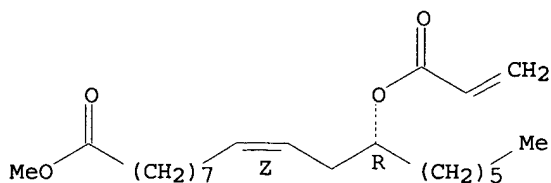
RN 330197-59-6 HCAPLUS

CN 9-Octadecenoic acid, 12-[(1-oxo-2-propenyl)oxy]-, methyl ester, (9Z,12R)-, polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

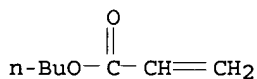
CRN 14202-22-3  
CMF C22 H38 O4

Absolute stereochemistry.  
Double bond geometry as shown.



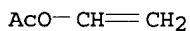
CM 2

CRN 141-32-2  
CMF C7 H12 O2



CM 3

CRN 108-05-4  
CMF C4 H6 O2

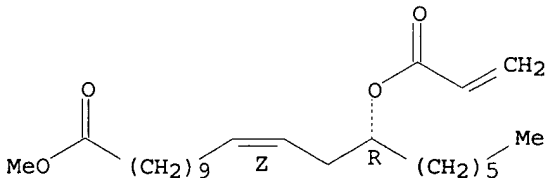


RN 330197-63-2 HCAPLUS  
CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenyl acetate, ethenyl tert-decanoate, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

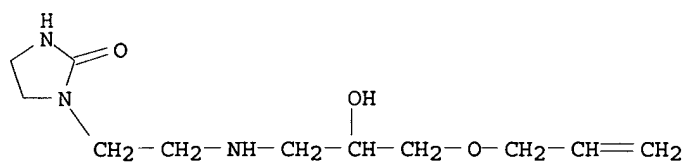
CRN 330197-62-1  
CMF C24 H42 O4

Absolute stereochemistry.  
Double bond geometry as shown.



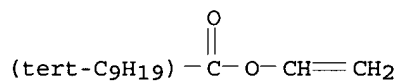
CM 2

CRN 85356-84-9  
CMF C11 H21 N3 O3



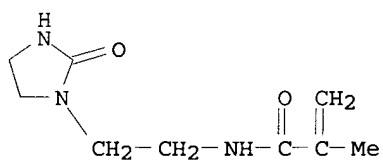
CM 3

CRN 26544-09-2  
CMF C12 H22 O2  
CCI IDS



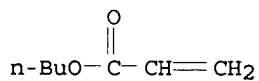
CM 4

CRN 3089-19-8  
CMF C9 H15 N3 O2



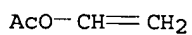
CM 5

CRN 141-32-2  
CMF C7 H12 O2

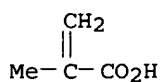


CM 6

CRN 108-05-4  
CMF C4 H6 O2



CM 7

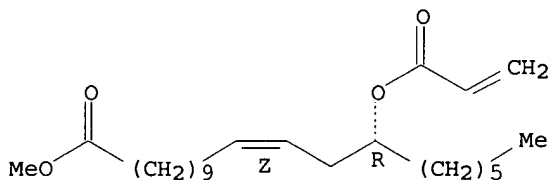
CRN 79-41-4  
CMF C4 H6 O2

RN 330197-65-4 HCAPLUS  
 CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, ethenylbenzene, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

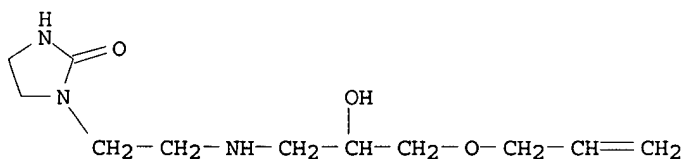
CM 1

CRN 330197-62-1  
CMF C24 H42 O4

Absolute stereochemistry.  
 Double bond geometry as shown.

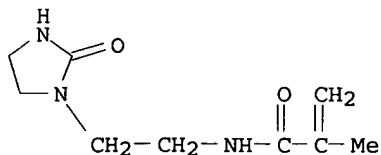


CM 2

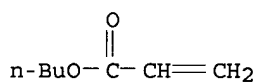
CRN 85356-84-9  
CMF C11 H21 N3 O3

CM 3

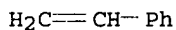
CRN 3089-19-8  
CMF C9 H15 N3 O2



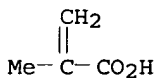
CM 4

CRN 141-32-2  
CMF C7 H12 O2

CM 5

CRN 100-42-5  
CMF C8 H8

CM 6

CRN 79-41-4  
CMF C4 H6 O2

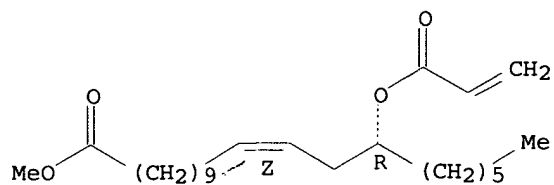
RN 330197-68-7 HCAPLUS

CN 11-Eicosenoic acid, 14-[(1-oxo-2-propenyl)oxy]-, methyl ester, (11Z,14R)-, polymer with butyl 2-propenoate, 2-hydroxy-1-(2-propenyloxy)-1-propanesulfonic acid monosodium salt, 1-[2-[[2-hydroxy-3-(2-propenyloxy)propyl]amino]ethyl]-2-imidazolidinone, methyl 2-methyl-2-propenoate, 2-methyl-N-[2-(2-oxo-1-imidazolidinyl)ethyl]-2-propenamide, 2-methyl-2-propenoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 330197-62-1  
CMF C24 H42 O4

Absolute stereochemistry.  
Double bond geometry as shown.

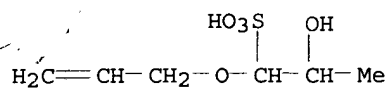


CM

2

CRN 143167-46-6

CMF C6 H12 O5 S . Na



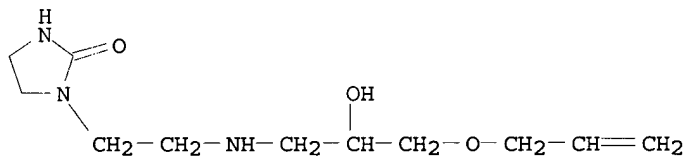
● Na

CM

3

CRN 85356-84-9

CMF C11 H21 N3 O3

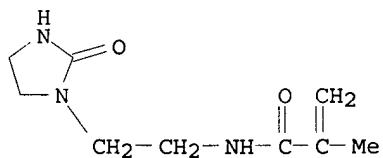


CM

4

CRN 3089-19-8

CMF C9 H15 N3 O2

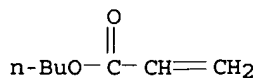


CM

5

CRN 141-32-2

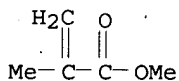
CMF C7 H12 O2



CM 6

CRN 80-62-6

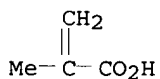
CMF C5 H8 O2



CM 7

CRN 79-41-4

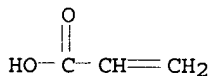
CMF C4 H6 O2



CM 8

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09K003-00

INCL 252182120

CC 42-12 (Coatings, Inks, and Related Products)

IT **Adhesives**

(**pressure-sensitive**; low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

IT 108-05-4DP, Vinyl acetate, polymer with Bu acrylate and castor oil methacrylate 141-32-2DP, Butyl acrylate, polymer with vinyl acetate and castor oil methacrylate 85356-84-9DP, Sipomer WAM, polymer with acrylate, and lesquerella oil acrylate 98716-57-5P, Methyl ricinoleate methacrylate-vinyl acetate copolymer 330197-59-6P 330197-63-2P 330197-65-4P 330197-68-7P 330197-70-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(low min. film forming temperature and high Tg, internally plasticizing, and low VOC latex coating compns.)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 29 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:802401 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 133:351243  
 TITLE: **Pressure-sensitive adhesives** for marking films  
 INVENTOR(S): Lee, Ivan S. P.; Yeadon, Graham; Keller, Paul  
 PATENT ASSIGNEE(S): Avery Dennison Corporation, USA  
 SOURCE: U.S., 13 pp., Cont.-in-part of U.S. 5,895,801.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6147165	A	20001114	US 1998-37589	1998 0309
US 5895801	A	19990420	US 1997-829002	1997 0331
CA 2285406	AA	19981008	CA 1998-2285406	1998 0317
CA 2285406	C	20040316		
WO 9844064	A1	19981008	WO 1998-US5203	1998 0317
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
EP 971994	A1	20000119	EP 1998-911723	1998 0317
EP 971994	B1	20041117		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 282677	E	20041215	AT 1998-911723	1998 0317
US 6569949	B1	20030527	US 2000-586122	2000 0602
PRIORITY APPLN. INFO.:				A2
US 1997-829002				1997 0331
US 1998-37589				A
				1998 0309

WO 1998-US5203

W

1998  
0317

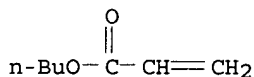
AB Inherently tacky, **pressure-sensitive adhesive** compns. useful in marking film applications are provided. The compns. comprise polymer particles prepared by emulsion polymerization of at least one monomer mixture and a **surfactant** system comprising at least one **surfactant** selected from the group consisting of sodium lauryl ether **surfactants** and sodium dioctyl sulfosuccinate **surfactants**. The monomer mixture comprises at least one alkyl acrylate, the alkyl group of which has from about 4 to 12 carbon atoms, preferably in an amount of from about 73% to 90% by weight, at least one unsatd. carboxylic acid containing from about 3 to 5 carbon atoms, preferably in an amount of from about 2% to 12% by weight, and at least one styrenic monomer, preferably present in an amount of from about 5% to 15% by weight. The particles typically have a mean diameter of about 300 nm or less, as determined by laser light scattering. In some embodiments, the compns. are prepared by sequential polymerization of the first and second monomer charges. The compns. may also contain one or more internal or external **crosslinkers**.

IT **148446-50-8P, Acrylic Acid-Butyl Acrylate-2-Ethylhexyl Acrylate-Methacrylic Acid**  
-Methyl Methacrylate-Styrene copolymer **213921-80-3P, Acrylic Acid-Butyl Acrylate-2-Ethylhexyl Acrylate-Methacrylic Acid-Tripropylene glycol diacrylate-Vinyl Acetate copolymer**  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
TEM (Technical or engineered material use); PREP (Preparation);  
USES (Uses)

(**pressure-sensitive adhesives** for marking films)

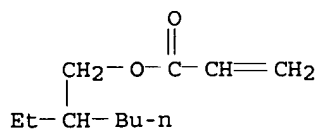
RN **148446-50-8 HCAPLUS**  
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2  
CMF C7 H12 O2

CM 2

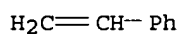
CRN 103-11-7  
CMF C11 H20 O2



CM 3

CRN 100-42-5

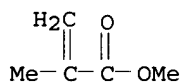
CMF C8 H8



CM 4

CRN 80-62-6

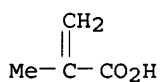
CMF C5 H8 O2



CM 5

CRN 79-41-4

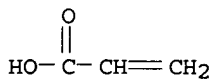
CMF C4 H6 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2

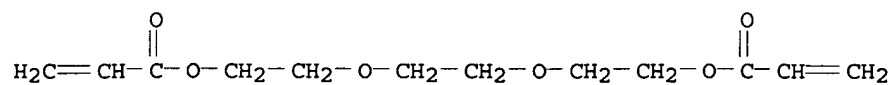


RN 213921-80-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenyl acetate, 2-ethylhexyl 2-propenoate, (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

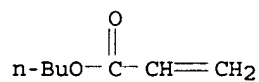
CRN 42978-66-5  
 CMF C15 H24 O6  
 CCI IDS



3 ( D1-Me )

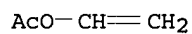
CM 2

CRN 141-32-2  
 CMF C7 H12 O2



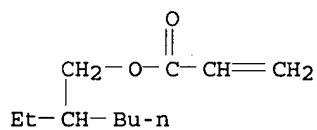
CM 3

CRN 108-05-4  
 CMF C4 H6 O2



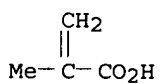
CM 4

CRN 103-11-7  
 CMF C11 H20 O2

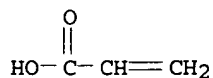


CM 5

CRN 79-41-4  
 CMF C4 H6 O2



CM 6

CRN 79-10-7  
CMF C3 H4 O2

IC ICM C09J133-08  
ICS C09J133-02  
INCL 525330200  
CC 38-3 (Plastics Fabrication and Uses)  
ST acrylate polymer **pressure sensitive adhesive**; surfactant emulsion polymer **pressure sensitive adhesive**  
IT Polysiloxanes, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(acrylates, polymers with acrylates; **pressure-sensitive adhesives** for marking films)  
IT **Surfactants**  
(**pressure-sensitive adhesives** for marking films)  
IT **Adhesives**  
(**pressure-sensitive**; **pressure-sensitive adhesives** for marking films)  
IT 79-10-7DP, **Acrylic Acid**, polymers with acrylates and silicone acrylates 79-41-4DP, **Methacrylic Acid**, polymers with acrylates and silicone acrylates 80-62-6DP, Methyl Methacrylate, polymers with acrylates and silicone acrylates 100-42-5DP, Styrene, polymers with acrylates and silicone acrylates 103-11-7DP, 2-Ethyl Hexyl Acrylate, polymers with acrylates and silicone acrylates 141-32-2DP, Butyl Acrylate, polymers with acrylates and silicone acrylates **148446-50-8P, Acrylic Acid-Butyl Acrylate-2-Ethylhexyl Acrylate-Methacrylic Acid-Methyl Methacrylate-Styrene copolymer 213921-80-3P, Acrylic Acid-Butyl Acrylate-2-Ethylhexyl Acrylate-Methacrylic Acid-Tripropylene glycol diacrylate-Vinyl Acetate copolymer**  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**pressure-sensitive adhesives** for marking films)  
IT 577-11-7, Aerosol OT-75 9004-82-4, Disponil FES 77  
RL: MOA (Modifier or additive use); USES (Uses)  
(**pressure-sensitive adhesives** for marking films)  
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 30 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:622656 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 133:282594  
TITLE: Study on acrylic hot melt **pressure**

sensitive **adhesive**  
 AUTHOR(S): Ren, Jia-Xiang; Du, Yi; Li, Jiang-Ping; Pan, Zhi-Chun; Liu, De-Shan; Zhou, Qi-Xiang  
 CORPORATE SOURCE: Department of Chemical Engineering, Tsinghua University, Beijing, 100084, Peop. Rep. China  
 SOURCE: Gaofenzi Cailiao Kexue Yu Gongcheng (2000), 16(4), 139-142  
 CODEN: GCKGEI; ISSN: 1000-7555  
 PUBLISHER: Gaofenzi Cailiao Kexue Yu Gongcheng Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB Acrylic hot melt **pressure-sensitive adhesive** composed of acrylic copolymer and ionic crosslinking agent was synthesized by means of bulk polymerization. The synthesized copolymer was made of three components: **soft monomer**: Bu acrylate and 2-Et hexyl acrylate; **hard monomer**: Me methacrylate, Me acrylate, vinyl acetate or styrene; functional **monomer**: acrylic acid, maleic anhydride and acrylamide. The synthesis discipline of the acrylic copolymer and the influences of copolymer component on the melting viscosity, 180° peel strength, tack and holding power of the **pressure-sensitive adhesive** were discussed. The **pressure-sensitive adhesive** with excellent properties was obtained, which could be used in the preparation of tape easily.  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST acrylic hot melt **pressure sensitive adhesive** prepn  
 IT **Adhesives**  
 (hot-melt, **pressure-sensitive**; preparation and properties of acrylic hot melt **pressure sensitive adhesive**)  
 IT Adhesion, physical  
 Polymerization  
 Viscosity  
 (preparation and properties of acrylic hot melt **pressure sensitive adhesive**)  
 IT 300348-81-6P, Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl acrylate-maleic anhydride-methyl acrylate-methyl methacrylate-vinyl acetate copolymer 300348-82-7P, Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl acrylate-maleic anhydride-methyl acrylate-vinyl acetate copolymer 300348-83-8P, Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl acrylate-maleic anhydride-methyl methacrylate-vinyl acetate copolymer 300348-84-9P, Acrylamide-acrylic acid-butyl acrylate-2-ethylhexyl acrylate-maleic anhydride-methyl acrylate-methyl methacrylate copolymer 300348-85-0P, Acrylamide-butyl acrylate-2-ethylhexyl acrylate-maleic anhydride-methyl acrylate-methyl methacrylate-vinyl acetate copolymer 300348-86-1P, Acrylamide-acrylic acid-2-ethylhexyl acrylate-maleic anhydride-methyl acrylate-methyl methacrylate-vinyl acetate copolymer  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation and properties of acrylic hot melt **pressure sensitive adhesive**)  
 L227 ANSWER 31 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:193626 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 133:136257  
 TITLE: Analyzing new developments in oligomers for UV curable **pressure-sensitive**

**adhesives**  
AUTHOR(S): Sciangola, Deborah A.  
CORPORATE SOURCE: ., USA  
SOURCE: Adhesives Age (2000), 43(2), 25, 27, 29, 31  
CODEN: ADHAAO; ISSN: 0001-821X  
PUBLISHER: Chemical Week Associates  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A study was made with three **urethane diacrylate** oligomers with Tg -30 to -38° and epoxy specialty oligomers with Tg -74° and 13°, and in one variation, two different C-9 hydrocarbon resins were studied: one with a ring and ball softening point of 115° and the other with softening point of 135°. Other components used were ethoxyethoxyethyl acrylate monomer, UV catalyst, emulsifying monomer (ethoxylated nonylphenol acrylate) and stabilizers. Peel strengths was achieved comparable to com. available water- and solvent-based general purpose permanent acrylic PSA, and it is also possible to determine what is needed in a UV-curable PSA to achieve good tack and shear adhesive failure temperature. It is also possible to apply a liquid PSA without necessity to heat it to evaporate solvent or water, and the adhesives would be 100% solids, so the cast thickness should be similar to the final thickness.  
CC 38-3 (Plastics Fabrication and Uses)  
ST urethane acrylate photocurable **pressure sensitive adhesive**; epoxy acrylate photocurable **pressure sensitive adhesive**  
IT Polyurethanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylates; analyzing new developments in oligomers for UV curable **pressure-sensitive adhesives**)  
IT Epoxy resins, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylates; analyzing new developments in oligomers for UV curable **pressure-sensitive adhesives**)  
IT **Adhesives**  
(photocurable, **pressure-sensitive**; analyzing new developments in oligomers for UV curable **pressure-sensitive adhesives**)  
IT 7328-17-8 50974-47-5, Polyethylene glycol nonylphenyl ether acrylate  
RL: MOA (Modifier or additive use); USES (Uses)  
(analyzing new developments in oligomers for UV curable **pressure-sensitive adhesives**)  
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L227 ANSWER 32 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:640936 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 131:272855  
TITLE: Thermoplastic resin composition for heat-sensitive adhesive  
INVENTOR(S): Mizumoto, Kiyoharu; Takahashi, Ikuo; Nakanishi, Kazuhiro; Ohmori, Yasuhiro; Tanabiki, Fumio; Nagasawa, Masakatsu; Inokami, Kiyotaka; Ohshima, Hiroyuki; Miki, Teruhiko; Takemoto, Shin; Kudo, Masataka; Baba, Tsuneo; Idehara, Kenji

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan; et al.  
 SOURCE: PCT Int. Appl., 309 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950356	A1	19991007	WO 1999-JP1613	1999 0330
W: US RW: BE, DE, FR, GB, IT				
JP 11293131	A2	19991026	JP 1998-121869	1998 0414
JP 2000086935	A2	20000328	JP 1998-276446	1998 0910
JP 2000104031	A2	20000411	JP 1998-274087	1998 0928
JP 2000103969	A2	20000411	JP 1998-274088	1998 0928
JP 2000104041	A2	20000411	JP 1998-274089	1998 0928
JP 2000129234	A2	20000509	JP 1998-303722	1998 1026
JP 2000129229	A2	20000509	JP 1998-303723	1998 1026
JP 2000127607	A2	20000509	JP 1998-303724	1998 1026
JP 2000127608	A2	20000509	JP 1998-303725	1998 1026
JP 2000191920	A2	20000711	JP 1998-372831	1998 1228
JP 2000191921	A2	20000711	JP 1998-372832	1998 1228
JP 2000191922	A2	20000711	JP 1998-372833	1998 1228
JP 2000212527	A2	20000802	JP 1999-16289	1999 0125
EP 989162	A1	20000329	EP 1999-910761	1999 0330
R: BE, DE, FR, GB, IT				
JP 2000053874	A2	20000222	JP 1999-92678	1999

JP 2000008007	A2	20000111	JP 1999-112193	0331
				1999
				0420
JP 2000008008	A2	20000111	JP 1999-112197	1999
				0420
JP 2000008022	A2	20000111	JP 1999-113701	1999
				0421
PRIORITY APPLN. INFO.:			JP 1998-86649	A
				1998
				0331
			JP 1998-121869	A
				1998
				0414
			JP 1998-109492	A
				1998
				0420
			JP 1998-109495	A
				1998
				0420
			JP 1998-110733	A
				1998
				0421
			JP 1998-276446	A
				1998
				0910
			JP 1998-274087	A
				1998
				0928
			JP 1998-274088	A
				1998
				0928
			JP 1998-274089	A
				1998
				0928
			JP 1998-303722	A
				1998
				1026
			JP 1998-303723	A
				1998
				1026
			JP 1998-303724	A
				1998
				1026
			JP 1998-303725	A
				1998
				1026

JP 1998-372831	A	1998 1228
JP 1998-372832	A	1998 1228
JP 1998-372833	A	1998 1228
JP 1999-16289	A	1999 0125
WO 1999-JP1613	W	1999 0330

## OTHER SOURCE(S): MARPAT 131:272855

AB A thermoplastic composition, useful for heat-sensitive pressure-sensitive adhesive with excellent blocking resistance, contains  $\geq 1$  solid plasticizers including (A) esters of  $\geq 3$  alkyl-substituted cyclohexene ring alc. or **crosslinked** six-member ring alc. with polybasic acid, and (B) phosphorus compds. having a m.p. 55-100°, and (C) diesters of (alkyl substituted) hydroquinone, resorcinol, or catechol with organic monobasic acid. Thus, bis(cis-3,3,5-trimethylcyclohexyl) phthalate was synthesized from cis-3,3,5-trimethylcyclohexanol and phthalic anhydride, 100 parts of which was mixed with anionic **surfactant** polyacarboxylic acid ammonium salt 15 and water 80 parts to give a solid plasticizer water dispersion, 100 parts of which was then mixed with 26 parts of 2-ethylhexyl acrylate/MMA/**acrylic acid** copolymer 28 parts, tackifier terpene resin 17 parts to form a heat-sensitive adhesive, showing adhesion strength 1150 gf/25 mm, block resistance 5 (5 best 1 worst).

IT **245652-94-2P**, Methyl methacrylate-butyl acrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer **245652-95-3P**, Methyl methacrylate-glycidyl methacrylate-butyl acrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer **245652-96-4P**, Methyl methacrylate-2-methylglycidyl methacrylate-butyl acrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer **245652-97-5P**, Methyl methacrylate-3,4-epoxycyclohexyl methacrylate-butyl acrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer **245652-98-6P**, Methyl methacrylate-3-chloro-2-hydroxypropyl methacrylate-butyl acrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer **245652-99-7P**, Methyl methacrylate-butyl acrylate-**acrylic acid**-styrene-Blemmer PE 200 graft copolymer **245653-00-3P**, Butyl acrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer **245653-01-4P**, Methyl methacrylate-**acrylic acid**-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(core-shell; thermoplastic resin composition for heat-sensitive adhesive)

RN 245652-94-2 HCAPLUS

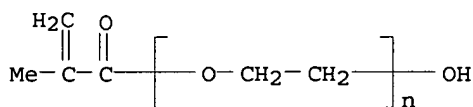
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate,  
 $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

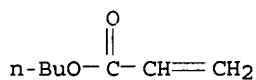
CCI PMS



CM 2

CRN 141-32-2

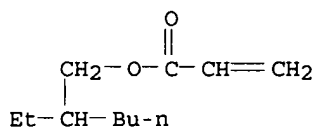
CMF C7 H12 O2



CM 3

CRN 103-11-7

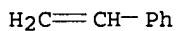
CMF C11 H20 O2



CM 4

CRN 100-42-5

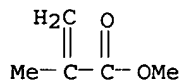
CMF C8 H8



CM 5

CRN 80-62-6

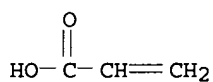
CMF C5 H8 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2



RN 245652-95-3 HCAPLUS

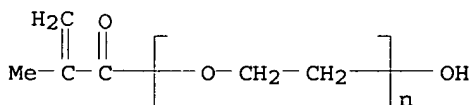
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

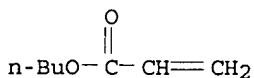
CCI PMS



CM 2

CRN 141-32-2

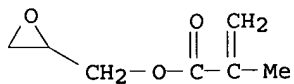
CMF C7 H12 O2



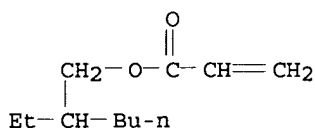
CM 3

CRN 106-91-2

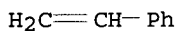
CMF C7 H10 O3



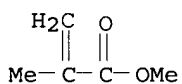
CM 4

CRN 103-11-7  
CMF C11 H20 O2

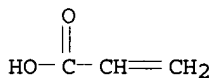
CM 5

CRN 100-42-5  
CMF C8 H8

CM 6

CRN 80-62-6  
CMF C5 H8 O2

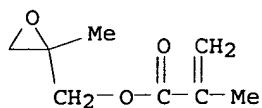
CM 7

CRN 79-10-7  
CMF C3 H4 O2

RN 245652-96-4 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate,  
 (2-methyloxiranyl)methyl 2-methyl-2-propenoate,  
 α-(2-methyl-1-oxo-2-propenyl)-ω-hydroxypoly(oxy-1,2-  
 ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

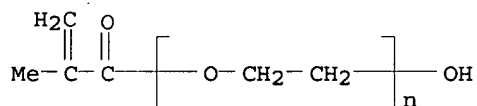
CM 1

CRN 41768-20-1  
CMF C8 H12 O3



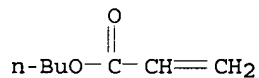
CM 2

CRN 25736-86-1  
CMF (C2 H4 O)<sub>n</sub> C4 H6 O2  
CCI PMS



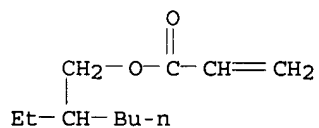
CM 3

CRN 141-32-2  
CMF C7 H12 O2



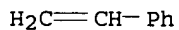
CM 4

CRN 103-11-7  
CMF C11 H20 O2

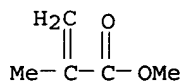


CM 5

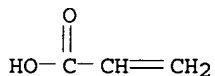
CRN 100-42-5  
CMF C8 H8



CM 6

CRN 80-62-6  
CMF C5 H8 O2

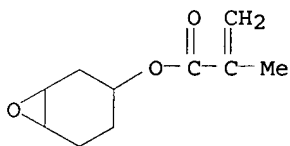
CM 7

CRN 79-10-7  
CMF C3 H4 O2

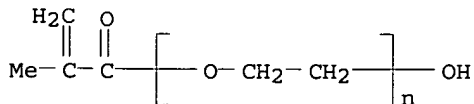
RN 245652-97-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate,  
 $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-  
ethanediyl), 7-oxabicyclo[4.1.0]hept-3-yl 2-methyl-2-propenoate  
and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 125566-99-6  
CMF C10 H14 O3

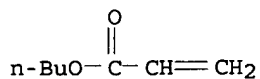
CM 2

CRN 25736-86-1  
CMF (C2 H4 O)<sub>n</sub> C4 H6 O2  
CCI PMS

CM 3

CRN 141-32-2

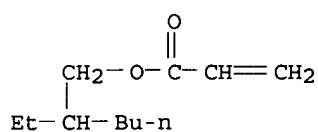
CMF C7 H12 O2



CM 4

CRN 103-11-7

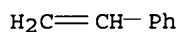
CMF C11 H20 O2



CM 5

CRN 100-42-5

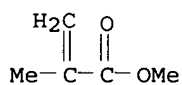
CMF C8 H8



CM 6

CRN 80-62-6

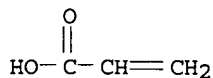
CMF C5 H8 O2



CM 7

CRN 79-10-7

CMF C3 H4 O2



RN 245652-98-6 HCAPLUS

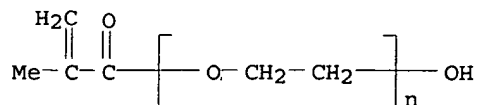
CN 2-Propenoic acid, 2-methyl-, 3-chloro-2-hydroxypropyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

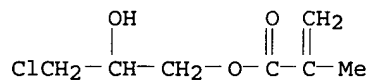
CCI PMS



CM 2

CRN 13159-52-9

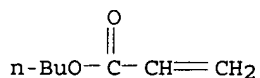
CMF C7 H11 Cl O3



CM 3

CRN 141-32-2

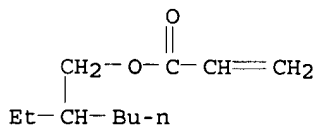
CMF C7 H12 O2



CM 4

CRN 103-11-7

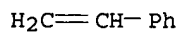
CMF C11 H20 O2



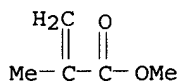
CM 5

CRN 100-42-5

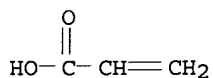
CMF C8 H8



CM 6

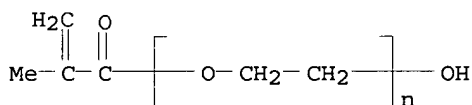
CRN 80-62-6  
CMF C5 H8 O2

CM 7

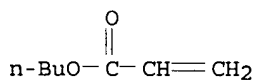
CRN 79-10-7  
CMF C3 H4 O2

RN 245652-99-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, ethenylbenzene,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)-  
 $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid,  
 graft (9CI) (CA INDEX NAME)

CM 1

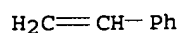
CRN 25736-86-1  
CMF (C2 H4 O)<sub>n</sub> C4 H6 O2  
CCI PMS

CM 2

CRN 141-32-2  
CMF C7 H12 O2

CM 3

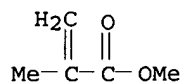
CRN 100-42-5  
CMF C8 H8



CM 4

CRN 80-62-6

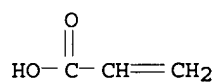
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



RN 245653-00-3 HCAPLUS

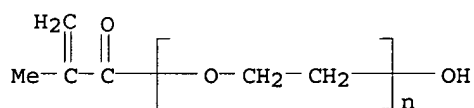
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene,  
2-ethylhexyl 2-propenoate and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)-  
 $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX  
NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

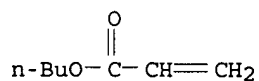
CCI PMS



CM 2

CRN 141-32-2

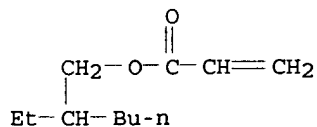
CMF C7 H12 O2



CM 3

CRN 103-11-7

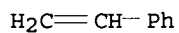
CMF C11 H20 O2



CM 4

CRN 100-42-5

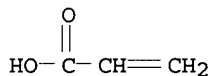
CMF C8 H8



CM 5

CRN 79-10-7

CMF C3 H4 O2



RN 245653-01-4 HCAPLUS

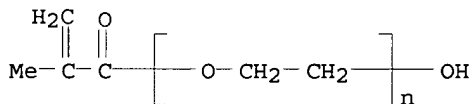
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate,  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

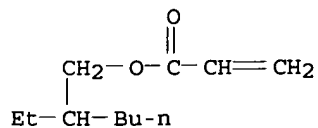
CCI PMS



CM 2

CRN 103-11-7

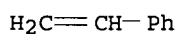
CMF C11 H20 O2



CM 3

CRN 100-42-5

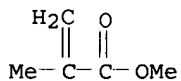
CMF C8 H8



CM 4

CRN 80-62-6

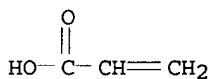
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



IT 27306-43-0, Styrene-2-ethylhexyl acrylate-methyl methacrylate-**acrylic acid** copolymer  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (plasticizer in thermoplastic resin composition for heat-sensitive adhesive)

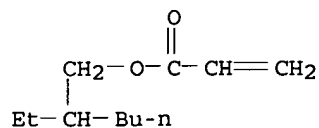
RN 27306-43-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7

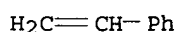
CMF C11 H20 O2



CM 2

CRN 100-42-5

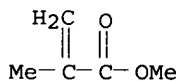
CMF C8 H8



CM 3

CRN 80-62-6

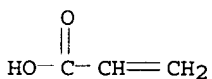
CMF C5 H8 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



IT 55935-28-9P, **Acrylic acid-butyl**  
 acrylate-methyl methacrylate copolymer ammonium salt  
 69040-23-9P, Methyl methacrylate-butyl  
 acrylate-diethylaminoethyl methacrylate-**acrylic**  
**acid copolymer 134503-52-9P 245652-90-8P**  
 245652-91-9P, Butyl acrylate-methyl methacrylate-  
 polyethylene glycol monomethacrylate graft copolymer  
 RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic  
 preparation); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (plasticizer in thermoplastic resin composition for heat-sensitive  
 adhesive)

RN 55935-28-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX  
 NAME)

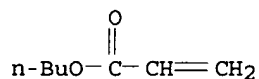
CM 1

CRN 26300-51-6

CMF (C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x  
CCI PMS

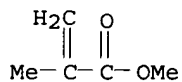
CM 2

CRN 141-32-2  
CMF C7 H12 O2



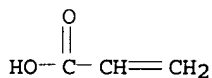
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

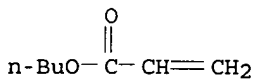
CRN 79-10-7  
CMF C3 H4 O2



RN 69040-23-9 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer  
with butyl 2-propenoate, methyl 2-methyl-2-propenoate and  
2-propenoic acid (9CI) (CA INDEX NAME)

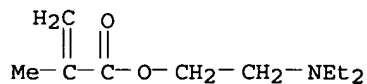
CM 1

CRN 141-32-2  
CMF C7 H12 O2



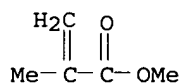
CM 2

CRN 105-16-8  
CMF C10 H19 N O2



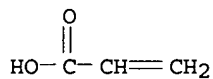
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

CRN 79-10-7  
CMF C3 H4 O2



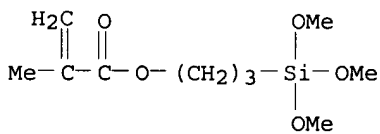
RN	134503-52-9	HCAPLUS
CN	2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)	

CM 1

CRN 102291-42-9  
CMF (C10 H20 O5 Si . C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x  
CCI PMS

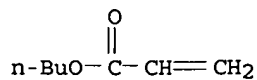
CM 2

CRN 2530-85-0  
CMF C10 H20 O5 Si



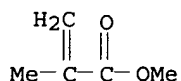
CM 3

CRN 141-32-2  
CMF C7 H12 O2



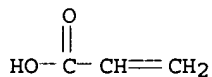
CM 4

CRN 80-62-6  
CMF C5 H8 02



CM 5

CRN 79-10-7  
CMF C3 H4 O2



```

RN      245652-90-8   HCAPPLUS
CN      2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
        2-propenoate, ethenylbenzene, 2-propenoic acid and
        3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt
        (9CI) (CA INDEX NAME)

```

CM 1

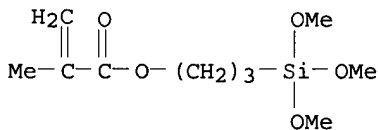
```

CRN  96926-71-5
CMF  (C10 H20 O5 Si . C8 H8 . C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x
CCI  PMS

```

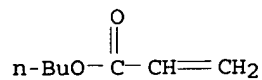
CM 2

CRN 2530-85-0  
CMF C10 H20 O5 Si



CM 3

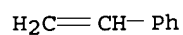
CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 100-42-5

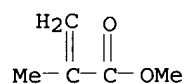
CMF C8 H8



CM 5

CRN 80-62-6

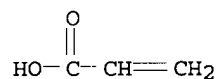
CMF C5 H8 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2



RN 245652-91-9 HCAPLUS

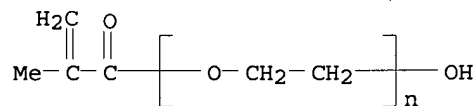
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate and  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -  
hydroxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

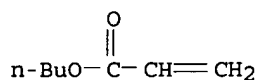
CCI PMS



CM 2

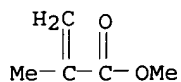
CRN 141-32-2

CMF C7 H12 O2



CM 3

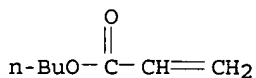
CRN 80-62-6  
CMF C5 H8 O2



IT 26300-51-6, Methyl methacrylate-butyl acrylate-  
acrylic acid copolymer  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); USES (Uses)  
(plasticizer in thermoplastic resin composition for heat-sensitive  
adhesive)  
RN 26300-51-6 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

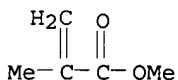
CM 1

CRN 141-32-2  
CMF C7 H12 O2



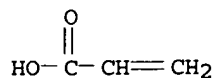
CM 2

CRN 80-62-6  
CMF C5 H8 O2



CM 3

CRN 79-10-7  
CMF C3 H4 O2



IT 245652-92-0P 245652-93-1P

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermoplastic resin composition for heat-sensitive adhesive)

RN 245652-92-0 HCAPLUS

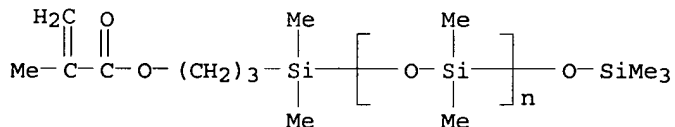
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate,  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)], 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)<sub>n</sub> C12 H26 O3 Si2

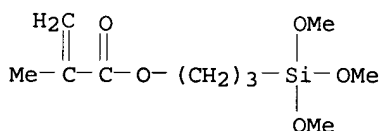
CCI PMS



CM 2

CRN 2530-85-0

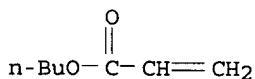
CMF C10 H20 O5 Si



CM 3

CRN 141-32-2

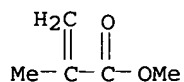
CMF C7 H12 O2



CM 4

CRN 80-62-6

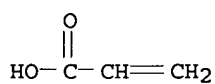
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



RN 245652-93-1 HCAPLUS

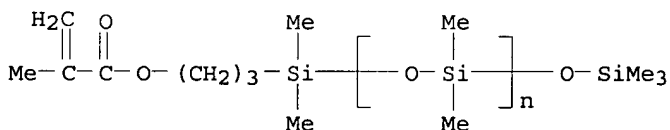
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-  
 $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)],  
 2-propenoic acid and 3-(trimethoxysilyl)propyl  
 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)<sub>n</sub> C12 H26 O3 Si2

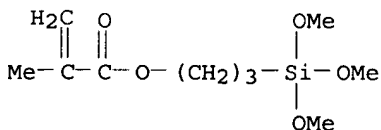
CCI PMS



CM 2

CRN 2530-85-0

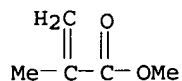
CMF C10 H20 O5 Si



CM 3

CRN 80-62-6

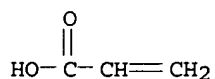
CMF C5 H8 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



IT 25085-19-2, Styrene-2-ethylhexyl acrylate-acrylic acid copolymer 25085-39-6, Styrene-butadiene-acrylic acid copolymer 30705-21-6, 2-Ethylhexyl acrylate-methyl methacrylate-acrylic acid copolymer  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (thermoplastic resin composition for heat-sensitive adhesive)

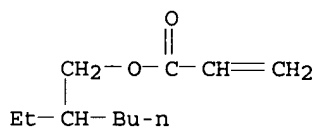
RN 25085-19-2 HCAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7

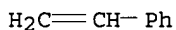
CMF C11 H20 O2



CM 2

CRN 100-42-5

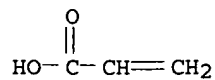
CMF C8 H8



CM 3

CRN 79-10-7

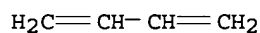
CMF C3 H4 O2



RN 25085-39-6 HCAPLUS  
 CN 2-Propenoic acid, polymer with 1,3-butadiene and ethenylbenzene  
 (9CI) (CA INDEX NAME)

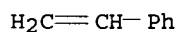
CM 1

CRN 106-99-0  
 CMF C4 H6



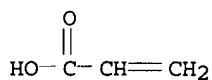
CM 2

CRN 100-42-5  
 CMF C8 H8



CM 3

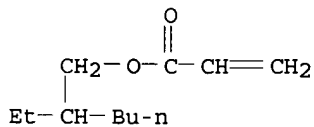
CRN 79-10-7  
 CMF C3 H4 O2



RN 30705-21-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX  
 NAME)

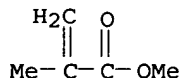
CM 1

CRN 103-11-7  
 CMF C11 H20 O2



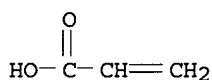
CM 2

CRN 80-62-6  
CMF C5 H8 O2



CM 3

CRN 79-10-7  
CMF C3 H4 O2



- IC ICM C08L101-00  
ICS C08L057-06; C08K005-49; C08K005-10; C08K003-36; C09J201-00;  
C09J007-02; B41M001-30; B41M005-00; C08F246-00; C08F230-08;  
C08F265-00; C08F291-10
- CC 38-3 (Plastics Fabrication and Uses)
- IT **245652-94-2P**, Methyl methacrylate-butyl acrylate-  
**acrylic acid**-styrene-2-ethylhexyl  
acrylate-Blemmer PE 200 graft copolymer **245652-95-3P**,  
Methyl methacrylate-glycidyl methacrylate-butyl acrylate-  
**acrylic acid**-styrene-2-ethylhexyl  
acrylate-Blemmer PE 200 graft copolymer **245652-96-4P**,  
Methyl methacrylate-2-methylglycidyl methacrylate-butyl acrylate-  
**acrylic acid**-styrene-2-ethylhexyl  
acrylate-Blemmer PE 200 graft copolymer **245652-97-5P**,  
Methyl methacrylate-3,4-epoxycyclohexyl methacrylate-butyl  
acrylate-**acrylic acid**-styrene-2-ethylhexyl  
acrylate-Blemmer PE 200 graft copolymer **245652-98-6P**,  
Methyl methacrylate-3-chloro-2-hydroxypropyl methacrylate-butyl  
acrylate-**acrylic acid**-styrene-2-ethylhexyl  
acrylate-Blemmer PE 200 graft copolymer **245652-99-7P**,  
Methyl methacrylate-butyl acrylate-**acrylic acid**  
-styrene-Blemmer PE 200 graft copolymer **245653-00-3P**,  
Butyl acrylate-**acrylic acid**  
-styrene-2-ethylhexyl acrylate-Blemmer PE 200 graft copolymer  
**245653-01-4P**, Methyl methacrylate-**acrylic acid**-styrene-2-ethylhexyl  
acrylate-Blemmer PE 200 graft  
copolymer  
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic  
preparation); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(core-shell; thermoplastic resin composition for heat-sensitive  
adhesive)
- IT 84-61-7, Dicyclohexyl phthalate 7479-28-9, Trimethylhydroquinone  
diacetate 21300-75-4, Dibornyl phthalate **27306-43-0**,  
Styrene-2-ethylhexyl acrylate-methyl methacrylate-**acrylic acid**  
copolymer 41026-16-8 94058-59-0 139189-30-3  
245652-87-3 245652-88-4 245652-89-5  
RL: MOA (Modifier or additive use); USES (Uses)  
(plasticizer in thermoplastic resin composition for heat-sensitive  
adhesive)
- IT **55935-28-9P**, Acrylic acid-butyl

acrylate-methyl methacrylate copolymer ammonium salt

69040-23-9P, Methyl methacrylate-butyl

acrylate-diethylaminoethyl methacrylate-acrylic

acid copolymer 134503-52-9P 245652-90-8P

245652-91-9P, Butyl acrylate-methyl methacrylate-

polyethylene glycol monomethacrylate graft copolymer

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic

preparation); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(plasticizer in thermoplastic resin composition for heat-sensitive adhesive)

IT 25068-38-6, Epikote 828 26300-51-6, Methyl

methacrylate-butyl acrylate-acrylic acid

copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical

or engineered material use); USES (Uses)

(plasticizer in thermoplastic resin composition for heat-sensitive adhesive)

IT 245652-92-0P 245652-93-1P

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic

preparation); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(thermoplastic resin composition for heat-sensitive adhesive)

IT 25085-19-2, Styrene-2-ethylhexyl acrylate-acrylic

acid copolymer 25085-39-6, Styrene-butadiene-

acrylic acid copolymer 30705-21-6,

2-Ethylhexyl acrylate-methyl methacrylate-acrylic

acid copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical

or engineered material use); USES (Uses)

(thermoplastic resin composition for heat-sensitive adhesive)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 33 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:440043 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 131:75075

TITLE: Smear-resistant pigmented ink jet inks  
containing beta-diketone or ureido dispersants

INVENTOR(S): Page, Loretta Ann Grezzo; Ma, Sheau-Hwa;  
Simms, John A.

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 927751	A1	19990707	EP 1998-124302	1998 1221
EP 927751	B1	20020911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6037390	A	20000314	US 1997-2066	1997 1231

JP 11269417 A2 19991005 JP 1998-377710

1998  
1229

PRIORITY APPLN. INFO.:

US 1997-2066

P

1997  
1231

AB An ink jet ink composition is provided which contains an aqueous vehicle; a colorant; and a polymeric dispersant comprising 2 to 50% of monomers selected from  $\beta$ -diketone containing monomers and ureido monomers, as well as a combination of such ink with a media having basic groups such as primary or secondary amines and divalent cations.

IT 229020-08-0P, Acetoacetoxyethyl **methacrylate** -ethoxytriethylene glycol **methacrylate**-methacrylic acid copolymer

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(smear-resistant pigmented ink jet inks containing beta-diketone or ureido dispersants)

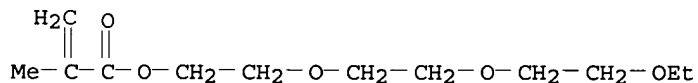
RN 229020-08-0 HCAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[2-(2-ethoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 39670-09-2

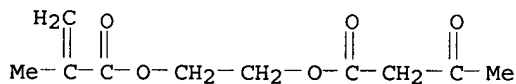
CMF C12 H22 O5



CM 2

CRN 21282-97-3

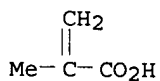
CMF C10 H14 O5



CM 3

CRN 79-41-4

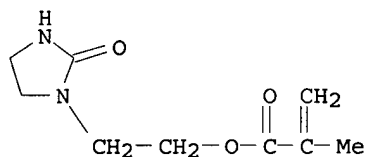
CMF C4 H6 O2



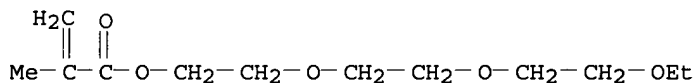
IT 229020-10-4P

RN	229020-10-4	HCAPLUS	
CN	2-Propenoic acid, 2-methyl-, 2-[2-(2-ethoxyethoxy)ethoxy]ethyl ester, polymer with methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, phenylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)		

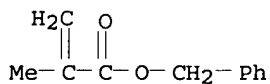
CRN 86261-90-7  
CMF C9 H14 N2 O3



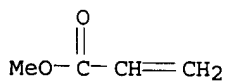
CRN 39670-09-2  
CMF C12 H22 O5



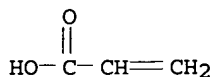
CRN 2495-37-6  
CMF C11 H12 O2



CRN 96-33-3  
CMF C4 H6 O2



CM 5

CRN 79-10-7  
CMF C3 H4 O2

IC ICM C09D011-00  
 CC 42-12 (Coatings, Inks, and Related Products)  
 IT 229020-08-0P, Acetoacetoxyethyl **methacrylate**  
 -ethoxytriethylene glycol **methacrylate**-methacrylic acid  
 copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP  
 (Preparation); RACT (Reactant or reagent)  
 (smear-resistant pigmented ink jet inks containing beta-diketone or  
 ureido dispersants)  
 IT 229020-10-4P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered  
 material use); PREP (Preparation); USES (Uses)  
 (smear-resistant pigmented ink jet inks containing beta-diketone or  
 ureido dispersants)  
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 34 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:125789 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 130:183466  
 TITLE: Polymer blends for **pressure**  
 -sensitive **adhesives**  
 INVENTOR(S): Pahl, Andreas; Roser, Heinz-josef  
 PATENT ASSIGNEE(S): Lohmann G.m.b.H. + Co. K.-G., Germany  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 896984	A1	19990217	EP 1998-113436	1998 0718
EP 896984	B1	20040602		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19734835	A1	19990218	DE 1997-19734835	1997 0812
AT 268355	E	20040615	AT 1998-113436	1998 0718
ES 2221099	T3	20041216	ES 1998-113436	1998 0718
PRIORITY APPLN. INFO.:				DE 1997-19734835 A

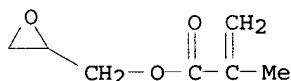
1997  
0812

AB Postcurable adhesives for adhesive tapes are based on blends of  $\geq 1$  (meth) **acrylate** copolymer(s) and poly(glycidyl **methacrylate**) (I) and/or poly(glycidyl **acrylate**) (I). The systems have good storage stability and are heat-curable. Thus, an adhesive composition was based on 10:90 acrylic acid-2-ethylhexyl **acrylate** copolymer 100, I 15, titanium acetylacetonate 0.3, Dyhard 100 S 0.4, and Dyhard UR 200 0.18 part and cured 10 min at 160°; resistance to brake fluid, gasoline, and salt water was demonstrated.

IT 25067-05-4, Poly(glycidyl **methacrylate**)  
26374-91-4, Poly(glycidyl **acrylate**)  
RL: TEM (Technical or engineered material use); USES (Uses)  
(blends with (meth)**acrylate** copolymers; compns. for thermally curable adhesives for adhesive tapes)

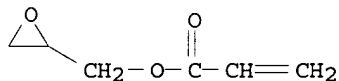
RN 25067-05-4 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2  
CMF C7 H10 O3

RN 26374-91-4 HCAPLUS  
CN 2-Propenoic acid, oxiranylmethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

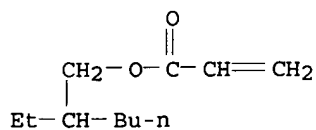
CRN 106-90-1  
CMF C6 H8 O3

IT 25134-51-4, Acrylic acid-2-ethylhexyl **acrylate** copolymer 26710-97-4, Acrylic acid-butyl **acrylate**-2-ethylhexyl **acrylate** copolymer 119131-43-0, Acrylic acid-isodecyl **acrylate** copolymer 220498-68-0, Acrylic acid-isodecyl **acrylate**-methyl **methacrylate**-Norsocryl 104 copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(blends with glycidyl (meth)**acrylate** homopolymers; compns. for thermally curable adhesives for adhesive tapes)

RN 25134-51-4 HCAPLUS  
CN 2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

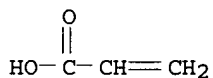
CM 1

CRN 103-11-7  
CMF C11 H20 O2



CM 2

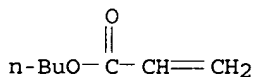
CRN 79-10-7  
CMF C3 H4 O2



RN 26710-97-4 HCAPLUS  
CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

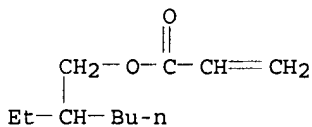
CM 1

CRN 141-32-2  
CMF C7 H12 O2



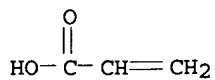
CM 2

CRN 103-11-7  
CMF C11 H20 O2



CM 3

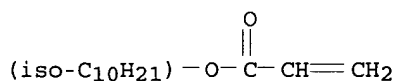
CRN 79-10-7  
CMF C3 H4 O2



RN 119131-43-0 HCAPLUS  
 CN 2-Propenoic acid, polymer with isodecyl 2-propenoate (9CI) (CA INDEX NAME)

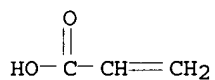
CM 1

CRN 1330-61-6  
 CMF C13 H24 O2  
 CCI IDS



CM 2

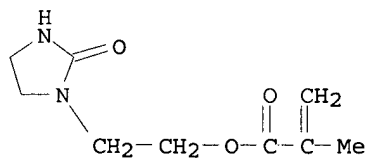
CRN 79-10-7  
 CMF C3 H4 O2



RN 220498-68-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with isodecyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

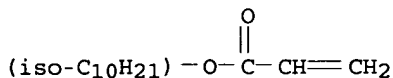
CM 1

CRN 86261-90-7  
 CMF C9 H14 N2 O3



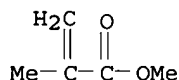
CM 2

CRN 1330-61-6  
 CMF C13 H24 O2  
 CCI IDS



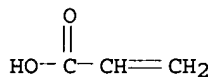
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

CRN 79-10-7  
CMF C3 H4 O2



IC ICM C08L033-06  
ICS C08L033-14; C09J007-02  
CC 38-3 (Plastics Fabrication and Uses)  
IT Resin acids  
RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, Me esters, Herculyn D, blends with (meth)  
**acrylate** copolymers; compns. for thermally curable  
adhesives for adhesive tapes)  
IT 25067-05-4, Poly(glycidyl **methacrylate**)  
26374-91-4, Poly(glycidyl **acrylate**)  
181186-44-7, A 140  
RL: TEM (Technical or engineered material use); USES (Uses)  
(blends with (meth)**acrylate** copolymers; compns. for  
thermally curable adhesives for adhesive tapes)  
IT 25134-51-4, Acrylic acid-2-ethylhexyl **acrylate**  
copolymer 26710-97-4, Acrylic acid-butyl  
**acrylate**-2-ethylhexyl **acrylate** copolymer  
119131-43-0, Acrylic acid-isodecyl **acrylate**  
copolymer 220498-68-0, Acrylic acid-isodecyl  
**acrylate**-methyl **methacrylate**-Norsocryl 104  
copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(blends with glycidyl (meth)**acrylate** homopolymers;  
compns. for thermally curable adhesives for adhesive tapes)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 35 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:12321 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 130:82921  
TITLE: Graft copolymer with a urea or imide

functional group as a pigment dispersant  
 INVENTOR(S): Huybrechts, Jozef  
 PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA  
 SOURCE: U.S., 10 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5852123	A	19981222	US 1996-733679	1996 1017
CA 2342240	AA	20000413	CA 1998-2342240	1998 1008
WO 2000020476	A1	20000413	WO 1998-US21219	1998 1008
W: AU, BR, CA, JP, KR, MX, NZ RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9897924	A1	20000426	AU 1998-97924	1998 1008
BR 9816057	A	20010612	BR 1998-16057	1998 1008
EP 1123331	A1	20010816	EP 1998-952158	1998 1008
R: BE, DE, FR, GB				
JP 2002526614	T2	20020820	JP 2000-574585	1998 1008
PRIORITY APPLN. INFO.:				
			US 1996-733679	A 1996 1017
			WO 1998-US21219	A 1998 1008

OTHER SOURCE(S): MARPAT 130:82921  
 AB An acrylic graft copolymer has weight-average mol. weight  $\geq 1500$  and 2-97% polymeric backbone and 2-97% macromonomer side chains attached to the backbone, wherein the graft copolymer has  $\geq$  apprx.1% imide or urea functional dispersing substituents attached to the backbone, the macromonomer, or both the backbone and the macromonomer. Thus, a macromonomer was prepared from 2-ethylhexyl methacrylate, 2-hydroxyethyl methacrylate (I) in the presence of diaquabis (borondifluorodiphenyl-glyoximate) cobaltate II and VAZO 88 initiator, grafted with styrene, Bu acrylate, I, and Plex 6844-0 (25% ethylene urea Et methacrylate in Me methacrylate) to prepare a dispersant.  
 IT 218138-71-7P 218798-73-3P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use);  
 PREP (Preparation); USES (Uses)

(graft acrylic polymers with urea or imide functional groups as pigment dispersants)

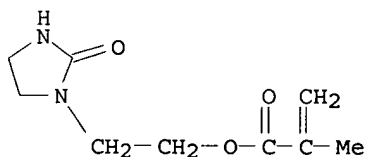
RN 218138-71-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

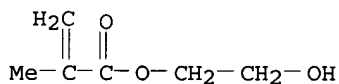
CMF C9 H14 N2 O3



CM 2

CRN 868-77-9

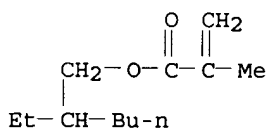
CMF C6 H10 O3



CM 3

CRN 688-84-6

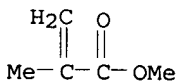
CMF C12 H22 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



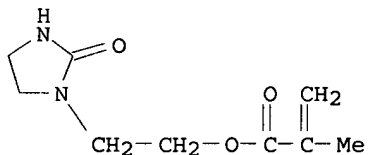
RN 218798-73-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with

butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl  
 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and  
 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, graft (9CI)  
 (CA INDEX NAME)

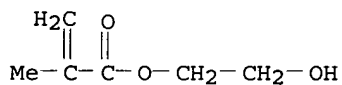
CM 1

CRN 86261-90-7  
 CMF C9 H14 N2 O3



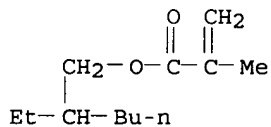
CM 2

CRN 868-77-9  
 CMF C6 H10 O3



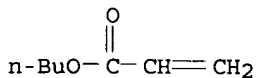
CM 3

CRN 688-84-6  
 CMF C12 H22 O2



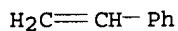
CM 4

CRN 141-32-2  
 CMF C7 H12 O2



CM 5

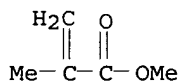
CRN 100-42-5  
 CMF C8 H8



CM 6

CRN 80-62-6

CMF C5 H8 O2



IT 27358-84-5P, 2-Hydroxypropyl **methacrylate**-methyl **methacrylate** copolymer 61604-57-7P, 2-Ethylhexyl **methacrylate**-2-Hydroxyethyl **methacrylate** copolymer 180869-00-5P, 2-Ethylhexyl **methacrylate**-2-Hydroxyethyl **methacrylate** -isobornyl **methacrylate** copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (graft acrylic polymers with urea or imide functional groups as pigment dispersants)

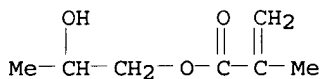
RN 27358-84-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-26-2

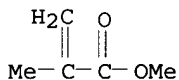
CMF C7 H12 O3



CM 2

CRN 80-62-6

CMF C5 H8 O2



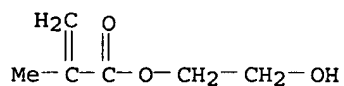
RN 61604-57-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

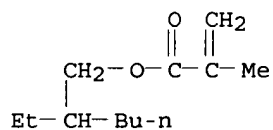
CMF C6 H10 O3



CM 2

CRN 688-84-6

CMF C12 H22 O2



RN 180869-00-5 HCAPLUS

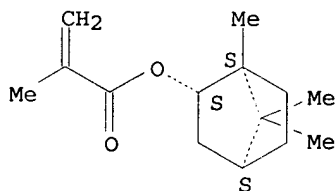
CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with  
 2-hydroxyethyl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-  
 trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA  
 INDEX NAME)

CM 1

CRN 7534-94-3

CMF C14 H22 O2

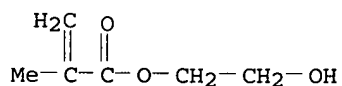
Relative stereochemistry.



CM 2

CRN 868-77-9

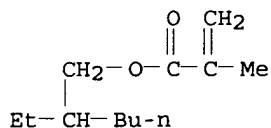
CMF C6 H10 O3



CM 3

CRN 688-84-6

CMF C12 H22 O2



IC ICM C08F265-10  
 INCL 525282000  
 CC 42-6 (Coatings, Inks, and Related Products)  
 IT 85-41-6DP, Phthalimide, reaction products with graft polymers  
**218138-71-7P** 218138-72-8DP, reaction products with  
 phthalimide **218798-73-3P**  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use);  
 PREP (Preparation); USES (Uses)  
 (graft acrylic polymers with urea or imide functional groups as  
 pigment dispersants)  
 IT **27358-84-5P**, 2-Hydroxypropyl **methacrylate**-methyl  
**methacrylate** copolymer **61604-57-7P**, 2-Ethylhexyl  
**methacrylate**-2-Hydroxyethyl **methacrylate**  
 copolymer **180869-00-5P**, 2-Ethylhexyl  
**methacrylate**-2-Hydroxyethyl **methacrylate**  
 -isobornyl **methacrylate** copolymer  
 RL: IMF (Industrial manufacture); **RCT (Reactant)**; PREP  
 (Preparation); **RCT (Reactant or reagent)**  
 (graft acrylic polymers with urea or imide functional groups as  
 pigment dispersants)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L227 ANSWER 36 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1998:779845 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 130:53423  
 TITLE: Vibration-absorbing, heat-resistant,  
**pressure**-sensitive acrylic  
**adhesive** composition for use in  
 adhesive tapes  
 INVENTOR(S): Pahl, Andreas; Domanski, Reinhold  
 PATENT ASSIGNEE(S): Lohmann G.m.b.H. & Co. K.-G., Germany  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 881271	A1	19981202	EP 1998-108230	1998 0506
EP 881271	B1	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19721846	A1	19981203	DE 1997-19721846	1997 0526
AT 235540	E	20030415	AT 1998-108230	1998

PRIORITY APPLN. INFO.: DE 1997-19721846 A 0506  
1997  
0526

AB The title adhesives, which are effective over a wide temperature range, contain (methy)acrylic polymers bearing primary or secondary amino and/or amide groups and bismaleimides as crosslinkers. A mixture of 15:5:80 acrylamide-acrylic acid-2-ethylhexyl **acrylate** copolymer, 0.1% Ti chelate, and 2% N,N'-m-phenylenebismaleimide was coated (100 g/m<sup>2</sup>) on a transfer adhesive tape to give a tape with peel adhesion before crosslinking 12, 20, 19, and 21 N/25 mm after 10 min at 160°, 2 h in brake fluid, 2 h in test gasoline, and 2 h in aqueous salt; and 23, 33, 32, and 34, resp., after crosslinking; vs. 12, 16, 15, 16, 19, 18, 14, and 16, resp., with no bismaleimide.

IT 40085-43-6, Acrylamide-acrylic acid-2-ethylhexyl **acrylate** copolymer 202581-28-0  
217313-61-6, Acrylic acid-2-ethylhexyl **acrylate** -N-methylacrylamide copolymer

RL: TEM (Technical or engineered material use); USES (Uses)  
(vibration-absorbing, heat-resistant, **pressure** -sensitive acrylic **adhesive** composition for use in adhesive tapes)

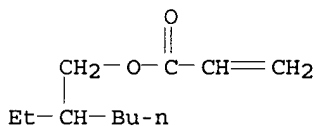
RN 40085-43-6 HCAPLUS

CN 2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 103-11-7

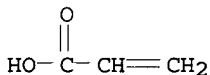
CMF C11 H20 O2



CM 2

CRN 79-10-7

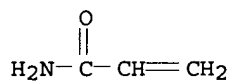
CMF C3 H4 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



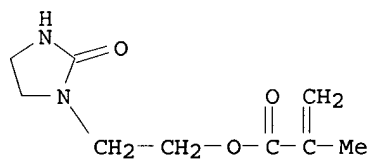
RN 202581-28-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 2-ethylhexyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl  
 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

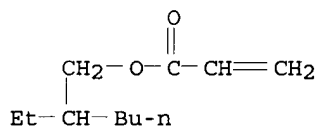
CMF C9 H14 N2 O3



CM 2

CRN 103-11-7

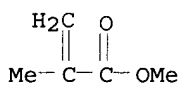
CMF C11 H20 O2



CM 3

CRN 80-62-6

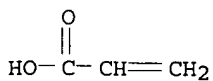
CMF C5 H8 O2



CM 4

CRN 79-10-7

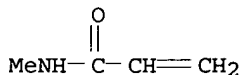
CMF C3 H4 O2



RN 217313-61-6 HCAPLUS  
 CN 2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate and  
 N-methyl-2-propenamide (9CI) (CA INDEX NAME)

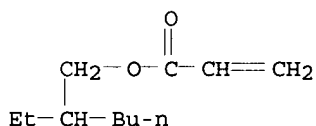
CM 1

CRN 1187-59-3  
 CMF C4 H7 N O



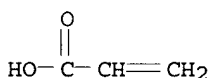
CM 2

CRN 103-11-7  
 CMF C11 H20 O2



CM 3

CRN 79-10-7  
 CMF C3 H4 O2



IC ICM C09J004-06  
 ICS C09J133-06  
 CC 38-3 (Plastics Fabrication and Uses)  
 IT Adhesive tapes  
 Vibration dampers  
 (vibration-absorbing, heat-resistant, **pressure**  
 -sensitive acrylic **adhesive** composition for use in  
 adhesive tapes)  
 IT 3006-93-7, N,N'-m-Phenylenebismaleimide 4856-87-5,  
 N,N'-Hexamethylenebismaleimide 5132-30-9, N,N'-  
 Ethylenebismaleimide 79591-36-9 123811-63-2 217458-64-5  
 217458-66-7 217458-67-8  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinker; vibration-absorbing, heat-resistant,  
**pressure**-sensitive acrylic **adhesive** composition  
 for use in adhesive tapes)  
 IT 13102-25-5, N,N'-(Sulfonyldi-p-phenylene)bismaleimide  
 13132-94-0, N,N'-(Oxydi-p-phenylene)bismaleimide 13676-54-5  
 13832-09-2  
 RL: MOA (Modifier or additive use); USES (Uses)

(vibration-absorbing, heat-resistant, **pressure**  
-sensitive acrylic **adhesive** composition for use in  
adhesive tapes)

IT 40085-43-6, Acrylamide-acrylic acid-2-ethylhexyl  
acrylate copolymer 202581-28-0

217313-61-6, Acrylic acid-2-ethylhexyl acrylate  
-N-methylacrylamide copolymer

RL: TEM (Technical or engineered material use); USES (Uses)  
(vibration-absorbing, heat-resistant, **pressure**  
-sensitive acrylic **adhesive** composition for use in  
adhesive tapes)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 37 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:721523 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 129:344538

TITLE: Single-phase system based on coreactive latex  
resins

INVENTOR(S): Verge, Christophe; Betremieux, Isabelle

PATENT ASSIGNEE(S): Elf Atochem S.A., Fr.; ATOFINA

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 875541	A1	19981104	EP 1998-401010	1998 0424
EP 875541	B1	20030910		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2762607	A1	19981030	FR 1997-5270	1997 0429
FR 2762607	B1	19990611		
JP 10316925	A2	19981202	JP 1998-114632	1998 0424
JP 2977793	B2	19991115		
CN 1204662	A	19990113	CN 1998-102964	1998 0424
US 6133365	A	20001017	US 1998-65446	1998 0424
AT 249502	E	20030915	AT 1998-401010	1998 0424
ES 2205401	T3	20040501	ES 1998-401010	1998 0424
CA 2237405	AA	19981029	CA 1998-2237405	1998 0429
CA 2237405	C	20020917		

PRIORITY APPLN. INFO.:

FR 1997-5270

A

1997  
0429

AB The title composition, useful for coatings crosslinkable at low temperature and post-crosslinkable by thermal treatment, comprises a mixture of two dispersions of polymers which are obtained by emulsion polymerization of unsatd. monomers containing NC(:X)NH groups (X = O, S) and unsatd. monomers bearing (masked) N-alkylol functional groups, resp.

IT **26428-44-4P**, Ethyl acrylate-N-methylolacrylamide  
copolymer **215435-36-2P**

RL: IMF (Industrial manufacture); **RCT (Reactant)**; PREP  
(Preparation); **RAC** (Reactant or reagent)

(single-phase system based on coreactive latex resins)

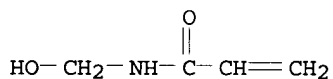
RN 26428-44-4 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5

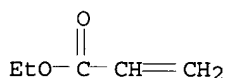
CMF C4 H7 N O2



CM 2

CRN 140-88-5

CMF C5 H8 O2



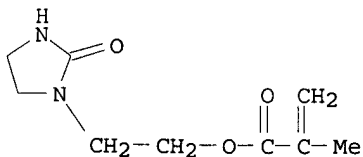
RN 215435-36-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

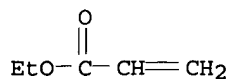
CRN 86261-90-7

CMF C9 H14 N2 O3



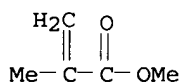
CM 2

CRN 140-88-5  
CMF C5 H8 O2



CM 3

CRN 80-62-6  
CMF C5 H8 O2



IT 215435-38-4P

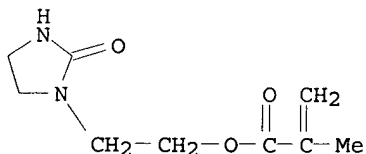
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(single-phase system based on coreactive latex resins)

RN 215435-38-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

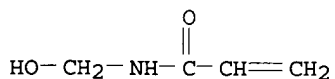
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



CM 2

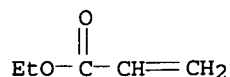
CRN 924-42-5  
CMF C4 H7 N O2



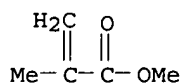
CM 3

CRN 140-88-5

CMF C5 H8 O2



CM 4

CRN 80-62-6  
CMF C5 H8 O2

IC ICM C09D005-02  
ICS D06M015-29; C08L057-12  
ICI C08L057-12, C08L057-12  
CC 42-10 (Coatings, Inks, and Related Products)  
ST latex unsatd imidazoline copolymer; methylolacrylamide  
acrylate copolymer latex  
IT 26428-44-4P, Ethyl acrylate-N-methylolacrylamide  
copolymer 215435-36-2P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP  
(Preparation); RACT (Reactant or reagent)  
(single-phase system based on coreactive latex resins)  
IT 215435-38-4P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(single-phase system based on coreactive latex resins)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 38 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1998:721522 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 129:344537  
TITLE: Single-phase system based on coreactive latex  
resins  
INVENTOR(S): Verge, Christophe; Betremieux, Isabelle  
PATENT ASSIGNEE(S): Elf Atochem S.A., Fr.  
SOURCE: Eur. Pat. Appl., 15 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 875540	A1	19981104	EP 1998-401009	1998 0424
EP 875540	B1	20021113		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

FR 2762606	A1	19981030	FR 1997-5269	1997 0429
FR 2762606	B1	19990611		
JP 10316927	A2	19981202	JP 1998-114631	1998 0424
JP 2977792	B2	19991115		
CN 1204661	A	19990113	CN 1998-102963	1998 0424
US 6107391	A	20000822	US 1998-65443	1998 0424
AT 227759	E	20021115	AT 1998-401009	1998 0424
ES 2186106	T3	20030501	ES 1998-401009	1998 0424
CA 2237396	AA	19981029	CA 1998-2237396	1998 0429
CA 2237396	C	20021008		
PRIORITY APPLN. INFO.:			FR 1997-5269	A 1997 0429

AB Coatings which are crosslinkable at ambient temperature and post-crosslinkable by thermal treatment consist of a mixture of two types of particles prepared by aqueous emulsion polymerization of monomers A and B, resp., where A is an unsatd. monomer containing NC(:X)NH groups (X = O, S) and B is an unsatd. monomer containing (masked) aldehyde groups. A first latex was prepared from Et **acrylate** and 1-(2-methacryloyloxyethyl)-imidazolin-2-one and a second latex was prepared from N-(2,2-dimethoxy-1-hydroxyethyl)acrylamide and Et **acrylate**.

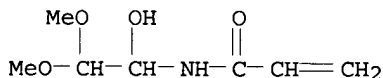
IT 215317-49-0P 215435-36-2P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (single-phase system based on coreactive latex resins)

RN 215317-49-0 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with N-(1-hydroxy-2,2-dimethoxyethyl)-2-propenamide (9CI) (CA INDEX NAME)

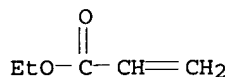
CM 1

CRN 112642-92-9  
 CMF C7 H13 N O4



CM 2

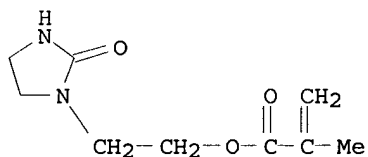
CRN 140-88-5  
 CMF C5 H8 O2



RN 215435-36-2 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl  
 2-propenoate and 2-(2-oxo-1-imidazolidinyl)ethyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

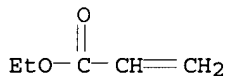
CM 1

CRN 86261-90-7  
 CMF C9 H14 N2 O3



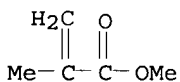
CM 2

CRN 140-88-5  
 CMF C5 H8 O2



CM 3

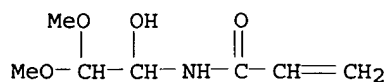
CRN 80-62-6  
 CMF C5 H8 O2



IT **215317-50-3P**  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered  
 material use); PREP (Preparation); USES (Uses)  
 (single-phase system based on coreactive latex resins)  
 RN 215317-50-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl  
 ester, polymer with ethyl 2-propenoate and N-(1-hydroxy-2,2-  
 dimethoxyethyl)-2-propenamide (9CI) (CA INDEX NAME)

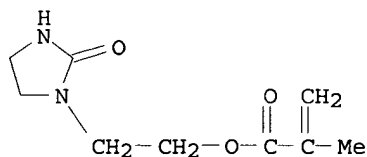
CM 1

CRN 112642-92-9  
 CMF C7 H13 N O4



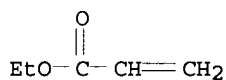
CM 2

CRN 86261-90-7  
CMF C9 H14 N2 O3



CM 3

CRN 140-88-5  
CMF C5 H8 O2



IC ICM C09D005-02  
ICS D06M015-356; C08L057-12  
ICI C08L057-12, C08L057-04  
CC 42-10 (Coatings, Inks, and Related Products)  
IT 215317-49-0P 215435-36-2P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP  
(Preparation); RACT (Reactant or reagent)  
(single-phase system based on coreactive latex resins)  
IT 215317-50-3P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(single-phase system based on coreactive latex resins)

L227 ANSWER 39 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1998:531794 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 129:245573  
TITLE: Homopolymerization studies of new fluorinated  
dimethacrylate monomers  
AUTHOR(S): Stansbury, Jeffrey W.; Choi, Kyung M.  
CORPORATE SOURCE: Polymers Div., Natl. Inst. Standards and  
Technol., Gaithersburg, MD, 20899, USA  
SOURCE: Polymer Preprints (American Chemical Society,  
Division of Polymer Chemistry) (1998), 39(2),  
878-879  
CODEN: ACPPAY; ISSN: 0032-3934  
PUBLISHER: American Chemical Society, Division of Polymer  
Chemistry  
DOCUMENT TYPE: Journal

LANGUAGE: English

AB A variety of synthetic routes based on alc.-epoxy addition reactions was used to produce a series of dimethacrylate monomers with fluorine contents of 21 % to 51 %. Several monomers include urethane groups to provide hydrogen bonding reinforcement to the polymers. Photopolymer. produced relatively high, and in some cases, extremely high, degrees of methacrylate conversion in these homopolymers compared with dimethacrylates commonly used in dental resins. The water uptake of the fluorinated polymers without urethane groups was very low and decreased with increasing fluorine content. Water sorption in the fluorinated urethane dimethacrylate polymers was greater and varied considerably with the individual monomer structures.

IT 213268-06-5P 213268-10-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and characterization of)

RN 213268-06-5 HCAPLUS

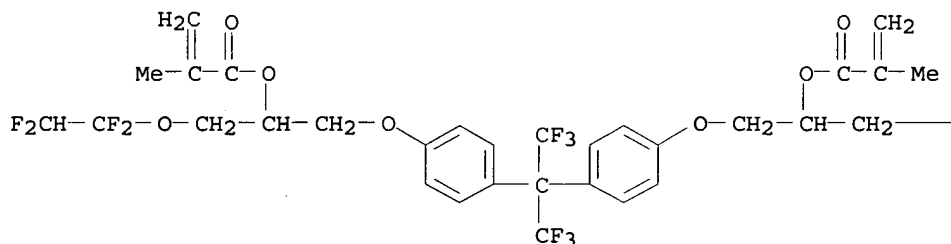
CN 2-Propenoic acid, 2-methyl-, [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[4,1-phenyleneoxy[1-[(1,1,2,2-tetrafluoroethoxy)methyl]-2,1-ethanediyl]] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 213267-96-0

CMF C33 H30 F14 O8

PAGE 1-A



PAGE 1-B

—O—CF<sub>2</sub>—CHF<sub>2</sub>

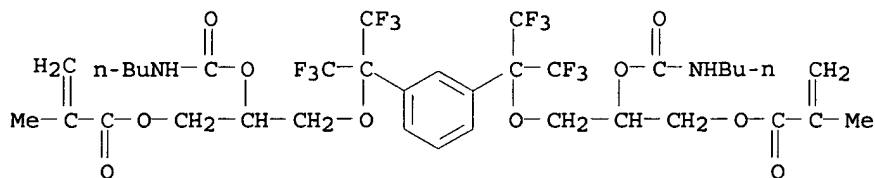
RN 213268-10-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,3-phenylenebis[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]oxy[2-[[[(butylamino)carbonyl]oxy]-3,1-propanediyl]] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 213268-03-2

CMF C36 H44 F12 N2 O10



CC 35-4 (Chemistry of Synthetic High Polymers)

IT 213268-05-4P 213268-06-5P 213268-07-6P 213268-08-7P

213268-09-8P 213268-10-1P 213268-11-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and characterization of)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 40 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:147107 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 128:154840

TITLE: **Pressure-sensitive adhesive**  
polymers and adhesives based thereonINVENTOR(S): Vanhoye, Didier; Lebez, Jean; Melot, Denis;  
Wiegert, Cyril

PATENT ASSIGNEE(S): ELF Atochem S.A., Fr.; ATOFINA

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 822206	A1	19980204	EP 1997-401763	1997 0722
EP 822206	B1	20030205		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
FR 2751974	A1	19980206	FR 1996-9663	1996 0731
FR 2751974	B1	19980918		
AT 232216	E	20030215	AT 1997-401763	1997 0722
ES 2189930	T3	20030716	ES 1997-401763	1997 0722
CA 2213052	AA	19980131	CA 1997-2213052	1997 0728
TW 460558	B	20011021	TW 1997-86110724	1997 0728
US 5908908	A	19990601	US 1997-903151	1997 0730
JP 10077454	A2	19980324	JP 1997-220061	

1997  
0731

CN 1183446 A 19980603 CN 1997-118063

1997  
0731

CN 1090221 B 20020904  
SG 70604 A1 20000222 SG 1997-2731

1997  
0731

PRIORITY APPLN. INFO.: FR 1996-9663 A

1996  
0731

AB The polymer, with glass-transition temperature (Tg)  $\leq -25^\circ$ , results from emulsion copolymn. of (1)  $\geq 1$  (meth)acrylic or vinyl monomer the homopolymer of which has Tg  $\leq -40^\circ$  40-95, (2)  $\geq 1$  (meth)acrylic or vinyl monomer the homopolymer of which has Tg  $\geq 0^\circ$  2-50, (3) (meth)acrylic acid 0.5-6, (4)  $\geq 1$  (meth)acrylic monomer ethoxylated with 1-20 mol ethylene oxide 0-5, (5)  $\geq 1$  (meth)acrylic monomer containing a ureido group 0.05-1, and (6)  $\geq 1$  (meth)acrylic monomer containing a sulfo group 0-2 weight%. The adhesive compns. contain  $\geq 40\%$  of such a polymer. Thus, emulsion copolymn. of 2-ethylhexyl **acrylate** 56, Me **acrylate** 41.5, acrylic acid 2.5, and **ethylimidazolidinone methacrylate** 0.5 part with (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> in the presence of lauryl mercaptan 0.1, ethoxylated nonylphenol 2.39 and Na lauryl sulfate 0.81 part gave an emulsion (54.8% solids) with average particle size 231 nm and Brookfield viscosity 475 mPa-s at 23°.

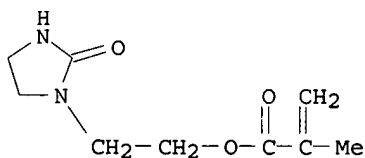
IT 202581-23-5P 202581-24-6P 202581-25-7P  
202581-26-8P 202581-27-9P 202581-28-0P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**pressure-sensitive adhesive polymers**)

RN 202581-23-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

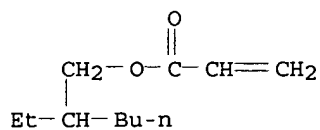
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



CM 2

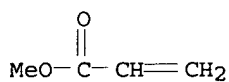
CRN 103-11-7  
CMF C11 H20 O2



CM 3

CRN 96-33-3

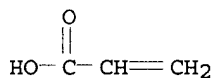
CMF C4 H6 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



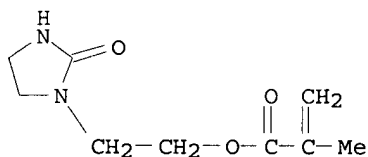
RN 202581-24-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-ethylhexyl 2-propenoate, methyl 2-propenoate,  
2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and  
2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

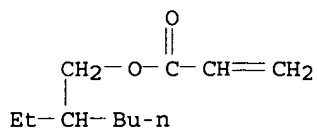
CMF C9 H14 N2 O3



CM 2

CRN 103-11-7

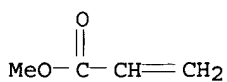
CMF C11 H20 O2



CM 3

CRN 96-33-3

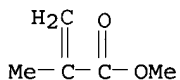
CMF C4 H6 O2



CM 4

CRN 80-62-6

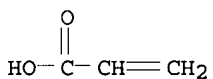
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



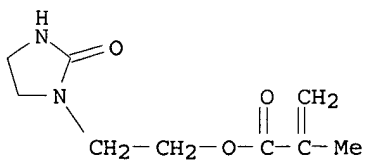
RN 202581-25-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-oxo-1-imidazolidinyl)ethyl  
 ester, polymer with 2-ethylhexyl 2-propenoate and 2-propenoic acid  
 (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

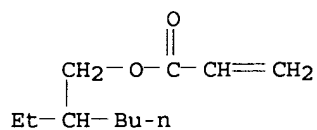
CMF C9 H14 N2 O3



CM 2

CRN 103-11-7

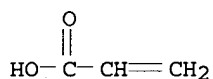
CMF C11 H20 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



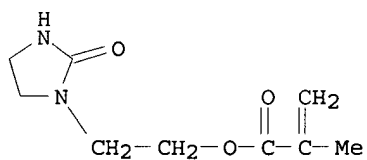
RN 202581-26-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[2-(2-ethoxyethoxy)ethoxy]ethyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86261-90-7

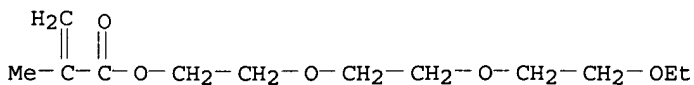
CMF C9 H14 N2 O3



CM 2

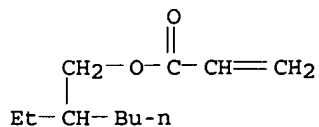
CRN 39670-09-2

CMF C12 H22 O5



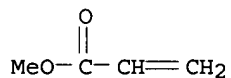
CM 3

CRN 103-11-7  
CMF C11 H20 O2



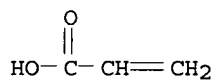
CM 4

CRN 96-33-3  
CMF C4 H6 O2



CM 5

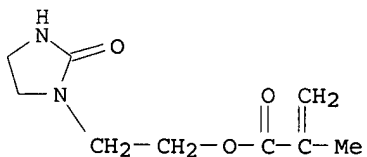
CRN 79-10-7  
CMF C3 H4 O2



RN 202581-27-9 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl 2-methyl-2-propenoate, 2-propenoic acid and sodium ethenesulfonate (9CI) (CA INDEX NAME)

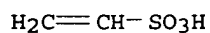
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



CM 2

CRN 3039-83-6  
CMF C2 H4 O3 S . Na



● Na

CM 3

CRN 108-05-4

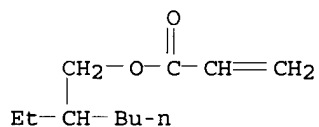
CMF C4 H6 O2



CM 4

CRN 103-11-7

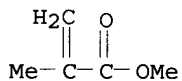
CMF C11 H20 O2



CM 5

CRN 80-62-6

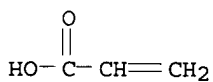
CMF C5 H8 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2

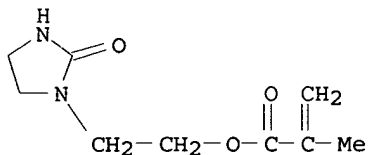


RN 202581-28-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-ethylhexyl 2-propenoate, 2-(2-oxo-1-imidazolidinyl)ethyl  
2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

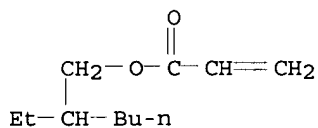
CM 1

CRN 86261-90-7  
CMF C9 H14 N2 O3



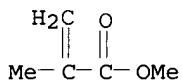
CM 2

CRN 103-11-7  
CMF C11 H20 O2



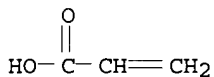
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

CRN 79-10-7  
CMF C3 H4 O2



IC ICM C08F220-12  
ICS C09J133-06  
CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38  
ST acrylic emulsion adhesive; **pressure** sensitive  
**adhesive** polymer; imidazolidone methacrylic deriv  
copolymer adhesive  
IT **Adhesives**  
(**pressure**-sensitive; acrylic **pressure**  
-sensitive **adhesive** polymers)  
IT 202581-23-5P 202581-24-6P 202581-25-7P  
202581-26-8P 202581-27-9P 202581-28-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(pressure-sensitive adhesive polymers)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L227 ANSWER 41 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:389098 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 127:5470

TITLE: Process for the preparation of  
**alkylimidazolidinone** (meth)  
**acrylates**

INVENTOR(S): Riondel, Alain; Paul, Jean-Michel

PATENT ASSIGNEE(S): Elf Atochem S.A., Fr.

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

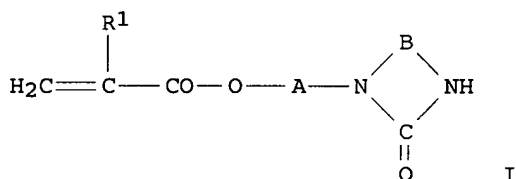
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 769493	A1	19970423	EP 1996-402172	1996 1011
EP 769493	B1	20020918		
R: AT, BE, CH, NL, PT, SE	DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU,			
FR 2739854	A1	19970418	FR 1995-12150	1995 1017
FR 2739854	B1	19971205		
AT 224373	E	20021015	AT 1996-402172	1996 1011
ES 2181858	T3	20030301	ES 1996-402172	1996 1011
CN 1153776	A	19970709	CN 1996-121631	1996 1016
CN 1102582	B	20030305		
CZ 286583	B6	20000517	CZ 1996-3027	1996 1016
CA 2188109	AA	19970418	CA 1996-2188109	1996 1017
CA 2188109	C	20001219		
JP 09124607	A2	19970513	JP 1996-295756	1996 1017
JP 2878211	B2	19990405		
US 5744613	A	19980428	US 1996-733266	1996 1017
KR 206530	B1	19990701	KR 1996-46587	1996 1017

PRIORITY APPLN. INFO.:

FR 1995-12150

A

1995  
1017OTHER SOURCE(S): MARPAT 127:5470  
GI

AB The compds. I (R<sup>1</sup> = H, Me; A, B = C<sub>2</sub>-5 alkylene) are prepared by reaction of anhydrides and heterocyclic alcs. Methacrylic anhydride and 1-(2-hydroxyethyl)-imidazolidyl-2-one were esterified in the presence of 2,6-di-tert-butyl-p-cresol and hydroquinone monomethyl ether stabilizers and 1-methylimidazole catalysts to give **ethylimidazolidone methacrylate**.

IC ICM C07D233-32

CC 35-2 (Chemistry of Synthetic High Polymers)

ST **alkylimidazolidinone acrylate monomer**; methacrylic anhydride esterification monomer manuf;  
hydroxyethylimidazolidylone esterification monomer manuf

IT Monomers

RL: IMF (Industrial manufacture); PREP (Preparation)  
(process for the preparation of **alkylimidazolidinone**  
(meth)**acrylates**)

IT 86261-90-7P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(process for the preparation of **alkylimidazolidinone**  
(meth)**acrylates**)

IT 760-93-0, Methacrylic anhydride 3699-54-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(process for the preparation of **alkylimidazolidinone**  
(meth)**acrylates**)

L227 ANSWER 42 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:96670 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 126:105250

TITLE: Laminated adhesive marking films containing  
acrylic urethane resin clear covering layers

INVENTOR(S): Tomyama, Takeshi; Maruyama, Tsutomu

PATENT ASSIGNEE(S): Kansai Paint Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 08302298	A2	19961119	JP 1995-105733	1995

JP 3499961 B2 20040223 0428  
 PRIORITY APPLN. INFO.: JP 1995-105733 1995  
 0428

AB Laminated films showing good interlayer adhesion and rapid clear covering film formation comprise successively **pressure**-sensitive **adhesive** layers, PVC film layers, color printing layers, and UV-curable acrylic urethane resin clear covering layers. Thus, a releasing sheet was laminated with a poly(iso-Bu acrylate) adhesive and a PVC sheet, printed with vinyl chloride-vinyl acetate copolymer, dried at room temperature for 2 h, printed with a UV ink (comprising **urethane diacrylate** 75, Me methacrylate 10, Bu acrylate 10, acetophenone initiator 5, and thioxanthone initiator 4 parts), and irradiated by UV to give a sheet showing good surface appearance, interlayer adhesion, elongation 32%, and water, acid, alkali, and weather resistance.

IC ICM C09J007-02  
 ICS C09J007-02

CC 38-3 (Plastics Fabrication and Uses)

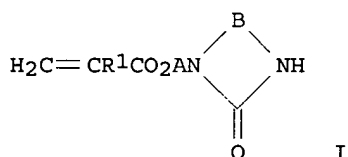
IT **Adhesives**  
 (**pressure**-sensitive, sheets; laminated adhesive marking films containing UV-curable acrylic urethane resin clear covering layers)

IT **Adhesive** films  
 (**pressure**-sensitive; laminated **adhesive** marking films containing UV-curable acrylic urethane resin clear covering layers)

L227 ANSWER 43 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:446491 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 125:114618  
 TITLE: Process of preparation of  
**alkylimidazolidone methacrylates**  
 INVENTOR(S): Riondel, Alain; Herbst, Gilles; Levray, Andre  
 PATENT ASSIGNEE(S): Elf Atochem S.A., Fr.  
 SOURCE: Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 712846	A1	19960522	EP 1995-402556	1995 1115
EP 712846	B1	19990811		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2727112	A1	19960524	FR 1994-13848	1994 1118
FR 2727112	B1	19961220		
CA 2162838	AA	19960519	CA 1995-2162838	1995 1114

CA 2162838	C	20010814			
AT 183180	E	19990815	AT 1995-402556		1995
					1115
CN 1127750	A	19960731	CN 1995-119631		1995
					1117
CN 1052000	B	20000503			
US 5610313	A	19970311	US 1995-544438		1995
					1117
KR 153187	B1	19981116	KR 1995-41964		1995
					1117
CZ 289028	B6	20011017	CZ 1995-3038		1995
					1117
JP 08269016	A2	19961015	JP 1995-325131		1995
					1120
JP 2776782	B2	19980716			
PRIORITY APPLN. INFO.:			FR 1994-13848	A	1994
					1118
OTHER SOURCE(S):		MARPAT 125:114618			
GI					



AB The title compds. I (R<sup>1</sup> = H, Me; A, B = C<sub>2</sub>-C<sub>5</sub> hydrocarbyl chain) were prepared by **reaction** of (meth)acrylates with heterocyclic alcs. in presence of a catalyst consisting of a mixture of a Mg alcoholate and a Ca chelate of a 1,3-dicarbonyl compound or a tin alkoxide, oxide, or diester. E.g., reaction of (hydroxyethyl)imidazolidone and Me **methacrylate** in presence of (EtO)<sub>2</sub>Mg and dibutyltin oxide gave 81% **ethylimidazolidone methacrylate**.

IC ICM C07D233-32  
ICS C07D239-10; C07D243-04; C07D245-02

CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))

ST **alkylimidazolidone methacrylate** prepn;  
imidazolidone **methacrylate** prepn

IT 818-08-6 2414-98-4, Diethoxymagnesium 19372-44-2, Calcium acetylacetonate, uses 36915-24-9 56513-90-7 72072-39-0 73592-45-7 118448-18-3 178928-93-3 178928-94-4 178928-95-5 178928-96-6 178928-97-7  
RL: CAT (Catalyst use); USES (Uses)  
(preparation of **alkylimidazolidone methacrylates**)

IT 80-62-6 3699-54-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of **alkylimidazolidone methacrylates**)

IT 86261-90-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of **alkylimidazolidone methacrylates**)

L227 ANSWER 44 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:890013 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 123:288260

TITLE: Methacrylate-terminated epoxide-amine  
prepolymers with water resistance

INVENTOR(S): Tiller, Hans-Juergen; Helbig, Manfred Dr

PATENT ASSIGNEE(S): Germany

SOURCE: Ger. Offen., 5 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
DE 4336451	A1	19950427	DE 1993-4336451	1993 1026
				1993 1026

PRIORITY APPLN. INFO.:

DE 1993-4336451

AB Prepolymers X[NR2(R3NR2)mCH2CH(OR4)CH2OR1OCH2CH(OR4)CH2]nNR2(R3NR2)mX(I) and X[OR1OCH2CH(OR4)CH2NR2(R3NR2)mCH2CH(OR4)CH2]nOR1OX [X = H2C:CMcCO2CH2CH(OR4)CH2; R1 = divalent hydrocarbyl optionally containing F; R2 = F-containing hydrocarbyl; R3 = hydrocarbyl optionally containing F; R4 = H, SiMe3, alkylaminocarbonyl; m = 0-1; n = 1-3], useful as adhesives, etc., are prepared Reacting 58.75 mmol bisphenol A diglycidyl ether with 117.50 mmol 3-(trifluoromethyl)aniline and reacting the product with 117.50 mmol glycidyl methacrylate gave I [R1 = p-C6H4CMe2-p-C6H4; R2 = m-(F3C)C6H4; R4 = H; m = 0; n = 1] which was mixed with a **urethane dimethacrylate**, Me methacrylate, and Bz2O2, placed between sheets of a Ti alloy, and cured at 80° to give tensile shear adhesion 77.3 MPa initially and 65.8 MPa after 2 h in boiling water.

IC ICM C08G059-17

ICS C08G059-14; C08L063-10; C08J003-24

ICA C08J005-00; C09J163-10; C09D163-10

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 35, 38

IT Epoxy resins, preparation

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (reaction products with (**trifluoromethyl**)aniline, **methacrylate**-terminated; preparation and use for water-resistant adhesives)

IT 79-41-4DP, esters with bisphenol A diglycidyl ether-(trifluoromethyl)aniline adducts 98-16-8DP, 3-(Trifluoromethyl)aniline, reaction products with bisphenol A diglycidyl ether, methacrylate esters 106-91-2DP, reaction products with bisphenol A diglycidyl ether-(trifluoromethyl)aniline adducts 1675-54-3DP, reaction products with (**trifluoromethyl**)aniline, **methacrylate** esters 169672-97-3P 169672-98-4P 169672-99-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(preparation and use for water-resistant adhesives)

L227 ANSWER 45 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:671035 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 123:201082

TITLE: Electron beam curing of dimer acid-based urethane acrylates for **pressure sensitive adhesives**

AUTHOR(S): Sasaki, Takashi; Takeda, Satoe; Shiraishi, Katsutoshi

CORPORATE SOURCE: Japan Atomic Energy Research Institute, Takasaki Radiation Chemistry Research Establishment, Takasaki, 370-12, Japan

SOURCE: JAERI-Conf (1995), 95-003 (Proceedings of the 6th Japan-China Bilateral Symposium on Radiation Chemistry, 1994), 424-7  
CODEN: JECNEC

PUBLISHER: Japan Atomic Energy Research Institute

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polyester **urethane diacrylate** prepolymers prepared from dimer acids were cured with low-energy electron beams to investigate adhesive properties of cured films. Among various type monomers added, monofunctional methacrylates such as isobornyl methacrylate (IBX-MA) were effective for higher peel strength cured films although the dose-to-cure for the mixts. increased to 100 kGy or more. The increase in the mol. weight of prepolymers resulted in lower curing rates but higher peel strength. Aging tests up to 80° for four weeks proved good stability in peel strength of the stored products.

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 37

ST polyester polyurethane diacrylate electron beam curing; dimer acid urethane acrylate curing; **pressure sensitive adhesive** urethane acrylate curing

IT Adhesives

Crosslinking

(electron-beam curing of dimer acid-based urethane acrylates for-**pressure sensitive adhesives**)

IT Urethane polymers, uses

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(polyester-, acrylates; electron-beam curing of dimer acid-based urethane acrylates for-**pressure sensitive adhesives**)

IT 79-41-4D, Methacrylic acid, derivs., polyurethanes 7534-94-3D, Isobornyl methacrylate, derivs., polyurethanes

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(electron-beam curing of dimer acid-based urethane acrylates for-**pressure sensitive adhesives**)

L227 ANSWER 46 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:478421 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 122:216225

TITLE: A **crosslinkable** polymer emulsion, a method for making a **crosslinked** polymer film, the film produced by the method

INVENTOR(S): and a **crosslinking** agent for  
 carboxy-substituted polymers  
 Bricker, Mark Charles; Van, Rheenen Paul Ralph  
 PATENT ASSIGNEE(S): Rohm & Haas Co., USA  
 SOURCE: Eur. Pat. Appl., 17 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 640675	A1	19950301	EP 1994-306221	1994 0823
R: DE, ES, FR, GB, GR, IT ZA 9406506	A	19950227	ZA 1994-6506	1994 0826
PRIORITY APPLN. INFO.:		US 1993-110532	A	1993 0823

AB The title emulsion useful for **pressure-sensitive adhesives** has a pH of 1.5-8.5 and includes a carboxy-substituted latex polymer dispersed in an aqueous medium, and iron(III) compound and an amount of a stabilizer selected from the group consisting of nonionic **surfactants** and protective colloids effective to sterically stabilize the emulsion. A method for making a **crosslinked** polymer film includes forming a layer of the emulsion and drying the layer to form the **crosslinked** polymer film, the film being ionically **crosslinked** between carboxy substituent groups of the polymer by iron(III) cations. A **crosslinking** agent for carboxy-substituted polymers includes particles of a water-insol. iron(III) compound having an average maximum characteristic linear dimension of  $\leq 5 \mu$ .

IT 162102-51-4P 162102-52-5P 162102-53-6P  
 162102-54-7P 162102-55-8P 162102-56-9P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (crosslinkable polymer emulsions for **pressure-sensitive adhesives**)

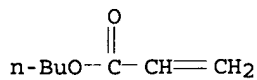
RN 162102-51-4 HCAPLUS  
 CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate, iron(3+) salt (9CI) (CA INDEX NAME)

CM 1

CRN 25085-41-0  
 CMF (C7 H12 O2 . C4 H6 O2 . C3 H4 O2)x  
 CCI PMS

CM 2

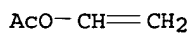
CRN 141-32-2  
 CMF C7 H12 O2



CM 3

CRN 108-05-4

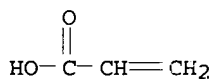
CMF C4 H6 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 162102-52-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, iron(3+) salt (9CI) (CA INDEX NAME)

CM 1

CRN 25035-82-9

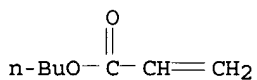
CMF (C7 H12 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 141-32-2

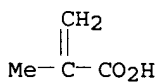
CMF C7 H12 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



RN 162102-53-6 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate, iron(3+) sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25085-41-0

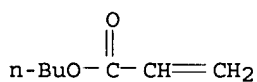
CMF (C7 H12 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 141-32-2

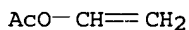
CMF C7 H12 O2



CM 3

CRN 108-05-4

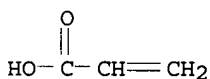
CMF C4 H6 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 162102-54-7 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and ethyl 2-propenoate, iron(3+) salt (9CI) (CA INDEX NAME)

CM 1

CRN 30323-62-7

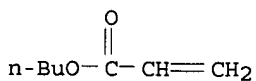
CMF (C8 H8 . C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 141-32-2

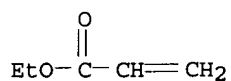
CMF C7 H12 O2



CM 3

CRN 140-88-5

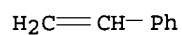
CMF C5 H8 O2



CM 4

CRN 100-42-5

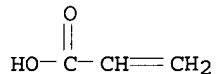
CMF C8 H8



CM 5

CRN 79-10-7

CMF C3 H4 O2



RN 162102-55-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and ethyl 2-propenoate, iron(3+) salt (9CI) (CA INDEX NAME)

CM 1

CRN 31671-56-4

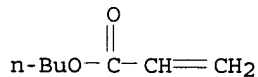
CMF (C8 H8 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 141-32-2

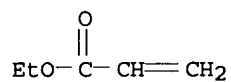
CMF C7 H12 O2



CM 3

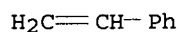
CRN 140-88-5

CMF C5 H8 O2



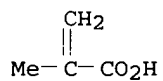
CM 4

CRN 100-42-5  
CMF C8 H8



CM 5

CRN 79-41-4  
CMF C4 H6 O2



RN 162102-56-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, methyl  
2-methyl-2-propenoate and 2-propenenitrile, iron(3+) salt (9CI)  
(CA INDEX NAME)

CM 1

CRN 30579-78-3

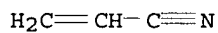
CMF (C8 H8 . C5 H8 O2 . C4 H6 O2 . C3 H3 N)x

CCI PMS

CM 2

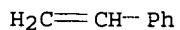
CRN 107-13-1

CMF C3 H3 N



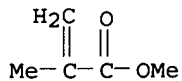
CM 3

CRN 100-42-5  
CMF C8 H8



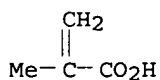
CM 4

CRN 80-62-6  
CMF C5 H8 O2



CM 5

CRN 79-41-4  
CMF C4 H6 O2



IT 162102-57-0  
RL: MOA (Modifier or additive use); USES (Uses)  
(**surfactants; crosslinkable** polymer  
emulsions for **pressure-sensitive**  
**adhesives**)

RN 162102-57-0 HCAPLUS

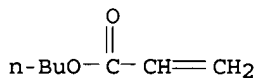
CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate,  
ethenylbenzene and 2-propenoic acid, iron(3+) salt (9CI) (CA  
INDEX NAME)

CM 1

CRN 70714-90-8  
CMF (C8 H8 . C7 H12 O2 . C5 H6 O4 . C3 H4 O2)x  
CCI PMS

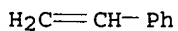
CM 2

CRN 141-32-2  
CMF C7 H12 O2



CM 3

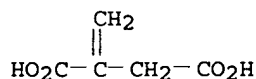
CRN 100-42-5  
CMF C8 H8



CM 4

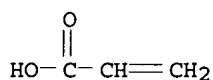
CRN 97-65-4

CMF C5 H6 O4



CM 5

CRN 79-10-7  
CMF C3 H4 O2



IC ICM C09J133-06  
ICS C09J007-02  
CC 38-3 (Plastics Fabrication and Uses)  
ST **pressure sensitive adhesive**  
**crosslinkable** polymer; **methacrylic acid**  
copolymer iron salt; **acrylic acid** copolymer  
iron salt; **crosslinking** agent acrylic polymer emulsion  
IT Ionomers  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**crosslinkable** polymer emulsions for **pressure**  
**-sensitive adhesives**)  
IT **Crosslinking** agents  
(ferric salts; **crosslinkable** polymer emulsions for  
**pressure-sensitive adhesives**)  
IT Alcohols, uses  
Amines, uses  
Fatty acids, uses  
Phenols, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ethoxylated, **surfactants**; **crosslinkable**  
polymer emulsions for **pressure-sensitive**  
**adhesives**)  
IT Naphthenic acids, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(iron salts, **crosslinking** agents;  
**crosslinkable** polymer emulsions for **pressure-**  
**sensitive adhesives**)  
IT **Surfactants**  
(nonionic, stabilizers; **crosslinkable** polymer  
emulsions for **pressure-sensitive**  
**adhesives**)  
IT **Adhesive** tapes  
**Adhesives**  
(**pressure-sensitive**, **crosslinkable**  
polymer emulsions for **pressure-sensitive**  
**adhesives**)  
IT 162102-51-4P 162102-52-5P 162102-53-6P  
162102-54-7P 162102-55-8P 162102-56-9P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)  
(**crosslinkable** polymer emulsions for **pressure**  
**-sensitive adhesives**)

IT 9002-93-1, Triton X.165  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinkable polymer emulsions for pressure-sensitive adhesives)

IT 1120-45-2, Ferric oleate 3130-28-7, Ferric octanoate  
 7321-53-1, Ferric 2-ethylhexanoate 14534-87-3, Ferric benzoate  
 69165-36-2, Ferric hexanoate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (crosslinking agents; crosslinkable polymer emulsions for pressure-sensitive adhesives)

IT 9003-11-6, Ethylene oxide-propylene oxide copolymer 39393-07-2  
 53694-15-8 106392-12-5, Pluronic F 87 162102-57-0  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (surfactants; crosslinkable polymer emulsions for pressure-sensitive adhesives)

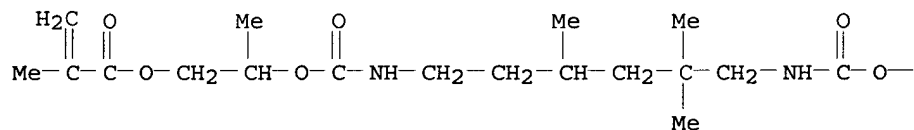
L227 ANSWER 47 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1994:491914 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 121:91914  
 TITLE: Self-lubricating abrasion-resistant material and products  
 INVENTOR(S): Liu, Andrew T. C.  
 PATENT ASSIGNEE(S): Dentsply International, Inc., USA  
 SOURCE: Eur. Pat. Appl., 24 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 599223	A1	19940601	EP 1993-118668	1993 1119
CA 2103398	AA	19940520	CA 1993-2103398	1993 1118
CA 2103398	C	20031014	US 1992-979093	A 1992 1119

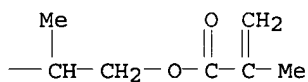
AB A dental composition including a self-lubricating abrasion-resistant material is used to form dental products having an outer surface with a low kinetic coefficient of friction. The dental products formed are abrasion resistant and self-lubricating across their entire cross sections. The self-lubricating material preferably includes polyethylene particles having a mol. weight of  $\geq 106$  and a particle size  $< 80 \mu\text{m}$  and/or Si-containing compds. The composition is formed into a dental prosthesis, such as an artificial tooth, inlay, onlay, facing, crown, or bridge. Thus, prosthetic teeth were molded from an interpenetrating network prepared from Me methacrylate 26.83, ultrahigh-mol.-weight polyethylene treated with O and F (maximum particle size  $50 \mu\text{m}$ ) 4.00, Bz2O2 0.17, 2,2,2-trifluoroethyl acrylate 2.11, ethylene glycol dimethacrylate 2.37, urethane dimethacrylate 1.52, Me methacrylate/ethylene dimethacrylate copolymer (98.8:1.2)

41.30, poly(Me methacrylate) 20.65, and pigment 1.05%.  
IT 156573-10-3  
RL: BIOL (Biological study)  
(interpenetrating networks with Me methacrylate polymers,  
self-lubricating particles in matrix of, for dental prostheses)  
RN 156573-10-3 HCAPLUS  
CN 11,14-Dioxa-2,9-diazaheptadec-16-enoic acid, 4,4,6,12,16-  
pentamethyl-10,15-dioxo-, 1-methyl-2-[(2-methyl-1-oxo-2-  
propenyl)oxy]ethyl ester, polymer with 1,2-ethanediyl  
bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate and  
2,2,2-trifluoroethyl 2-propenoate (9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 105883-40-7  
CMF C25 H42 N2 O8

PAGE 1-A



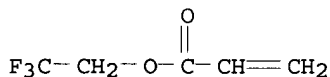
PAGE 1-B



CM 2

CRN 407-47-6

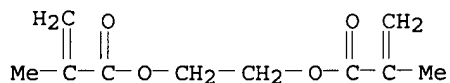
CMF C5 H5 F3 O2



CM 3

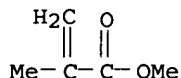
CRN 97-90-5

CMF C10 H14 O4



CM 4

CRN 80-62-6  
CMF C5 H8 O2



IC ICM A61K006-083  
ICS C08L051-00  
CC 63-7 (Pharmaceuticals)  
Section cross-reference(s): 38  
IT 76429-30-6 147554-84-5 **156573-10-3** 156573-11-4  
156573-12-5  
RL: BIOL (Biological study)  
(interpenetrating networks with Me methacrylate polymers,  
self-lubricating particles in matrix of, for dental prostheses)

L227 ANSWER 48 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1993:518872 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 119:118872  
TITLE: Low-odor UV **pressure-sensitive adhesives**  
AUTHOR(S): Miller, Henry C.  
CORPORATE SOURCE: Oaklands Corp. Cent., Sartomer Co., Exton, PA,  
19341, USA  
SOURCE: RadTech '92 North Am. UV/EB Conf. Expo., Conf.  
Proc. (1992), Volume 2, 739-50. RadTech Int.  
North Am.: Northbrook, Ill.  
CODEN: 58SXA8  
DOCUMENT TYPE: Conference  
LANGUAGE: English

AB Formulations, properties, and application variables for low-odor  
UV-curable **pressure-sensitive adhesives** are  
discussed. The main ingredients are 12 acrylate monomers, 3  
tackifiers, and a highly flexible **urethane diacrylate**.

CC 38-3 (Plastics Fabrication and Uses)  
ST UV curable **pressure sensitive adhesive**; low  
odor adhesive formulation property; **urethane diacrylate** blend adhesive; acrylate monomer blend  
adhesive; tackifier **pressure sensitive adhesive**

IT Tackifiers  
(rosin esters and resins as, for low-odor UV-curable  
**pressure-sensitive adhesives**)

IT Urethane polymers, compounds  
RL: USES (Uses)  
(acrylates, for low-odor UV-curable **pressure sensitive adhesives**)

IT Resin acids and Rosin acids  
RL: USES (Uses)  
(esters, tackifiers, for low-odor UV-curable **pressure sensitive adhesives**)

IT Crosslinking catalysts  
(photochem., for low-odor UV-curable **pressure sensitive adhesives**)

IT Crosslinking  
(photochem., of low-odor **pressure-sensitive adhesives**, UV-induced)

IT **Adhesives**  
(**pressure-sensitive**, UV-curable, low-odor,

formulations and properties and application variables of)

IT 2399-48-6 7328-17-8 9016-45-9 48145-04-6, 2-Phenoxyethyl  
acrylate 55462-93-6, Isododecyl acrylate 82727-34-2  
149315-74-2, CN 966 149615-25-8  
RL: USES (Uses)  
(for low-odor UV-curable **pressure-sensitive  
adhesives**)

IT 105-59-9 119-61-9, Benzophenone, uses 149260-52-6  
RL: USES (Uses)  
(photoinitiators, for curing of for low-odor UV-curable  
**pressure-sensitive adhesives**)

IT 115-77-5, uses  
RL: USES (Uses)  
(rosin ester modified with, tackifiers, for low-odor UV-curable  
**pressure-sensitive adhesives**)

IT 149659-55-2, Norsolene A 100 149659-56-3, Norsolene AR 95  
RL: USES (Uses)  
(tackifiers, for low-odor UV-curable **pressure  
-sensitive adhesives**)

L227 ANSWER 49 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1991:614919 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 115:214919  
TITLE: Fluorine- and/or silicone-containing  
poly(alkylene oxide) block copolymers and  
contact lenses therefrom  
INVENTOR(S): Mueller, Karl F.; Plankl, Walter L.  
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
SOURCE: Eur. Pat. Appl., 22 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 406161	A2	19910102	EP 1990-810428	1990 0612
EP 406161	A3	19920129		
EP 406161	B1	19950222		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5115056	A	19920519	US 1990-486493	1990 0228
ES 2068376	T3	19950416	ES 1990-810428	1990 0612
CA 2019177	AA	19901220	CA 1990-2019177	1990 0618
DD 299437	A5	19920416	DD 1990-341770	1990 0618
AU 9057683	A1	19910103	AU 1990-57683	1990 0619
AU 636359	B2	19930429		
JP 03037620	A2	19910219	JP 1990-158864	1990

JP 2925661 B2 19990728 0619  
 US 5334681 A 19940802 US 1993-168979 1993  
 1217  
 PRIORITY APPLN. INFO.: US 1989-368755 A 1989  
 0620  
 US 1990-486493 A 1990  
 0228  
 US 1990-630711 B1 1990  
 1220  
 US 1992-931646 B1 1992  
 0817  
 US 1993-73644 B1 1993  
 0608

AB F- and/or Si-containing block copolymers (Markush given) are described, which are the copolymn. product of mono-, di- or trivinyl-substituted poly(alkylene oxide) prepolymers and fluoroalkylalkylene acrylates or methacrylates, oligosiloxysilylalkyl acrylates or methacrylates, and optionally other copolymerizable comonomers. The block copolymers are prepared in solution or bulk and are characterized by high O permeability, flexibility and wettability and are therefore suited as biocompatible polymers, especially as contact lenses. A mixture of 5 g poly(ethylene oxide)urethane dimethacrylate (preparation given), 5 g tris(trimethylsiloxy)silylpropyl methacrylate, 4 g N-methylpyrrolidone, 6 g Me Et ketone and 0.4% benzoin Me ether, was UV-irradiated to give a clear, flexible hydrogel, suitable for contact lenses.

IT 134503-49-4P  
 RL: THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, for contact lenses)

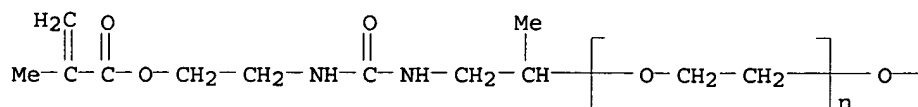
RN 134503-49-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester, polymer with  $\alpha$ -[1-methyl-2-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]amino]ethyl]- $\omega$ -[1-methyl-2-[[[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]amino]carbonyl]amino]ethoxy]poly(oxy-1,2-ethanediyl), block (9CI) (CA INDEX NAME)

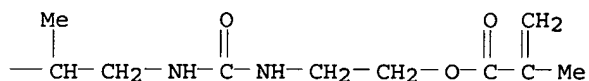
CM 1

CRN 134462-34-3  
 CMF (C2 H4 O)n C20 H34 N4 O7  
 CCI PMS

PAGE 1-A

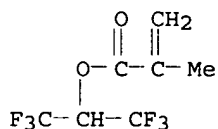


PAGE 1-B



CM 2

CRN 3063-94-3  
CMF C7 H6 F6 O2



IC ICM C08F283-06  
ICS G02C007-04

ICI C08F283-06, C08F214-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT 134443-73-5P 134462-35-4P 134462-36-5P 134462-37-6P  
134462-38-7P 134462-39-8P 134462-40-1P 134462-41-2P  
134462-42-3P 134462-43-4P 134503-47-2P 134503-48-3P  
**134503-49-4P** 134503-50-7P 134503-64-3P 134503-65-4P  
134503-66-5P 134503-68-7P 134503-69-8P 134503-70-1P  
134503-71-2P 134503-72-3P 134503-73-4P 134503-74-5P  
134503-75-6P 134590-69-5P 134590-70-8P 134623-69-1P  
134685-73-7P

RL: THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(preparation of, for contact lenses)

L227 ANSWER 50 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:144777 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 114:144777

TITLE: Process for the production of an attenuator  
material for acoustic waves and its use in the  
production of immersed acoustical screens

INVENTOR(S): Guyomar, Daniel; Tocquet, Bernard; Candau,  
Sauveur; Lemarechal, Pierre; Schroder, Andre

PATENT ASSIGNEE(S): Thomson-CSF S. A., Fr.

SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 382627	A1	19900816	EP 1990-400322	1990 0206
R: DE, ES, GB, IT, NL, SE				
FR 2642750	A1	19900810	FR 1989-1677	1989 0209
FR 2642750	B1	19910412		
CA 2009608	AA	19900809	CA 1990-2009608	1990 0208
JP 02261805	A2	19901024	JP 1990-29380	1990 0208
PRIORITY APPLN. INFO.:			FR 1989-1677	A 1989 0209

AB Title method comprises preparing an aqueous solution containing a monomer and a crosslinking agent, dispersing a water-gellable polymer porous powder in the solution, and crosslinking the mixture. Thus, dispersing 3 g Norsocryl powder in a mixture of H<sub>2</sub>O 80, acrylic acid 20, N,N'-methylenebisacrylamide 0.2, ammonium or K persulfate 0.66 g and curing 2 h at 70° gave a phase for manufacture of immersed acoustical screens.

IT 132893-93-7, Norsocryl  
RL: USES (Uses)  
(for attenuator material for acoustic waves)

RN 132893-93-7 HCAPLUS  
CN Norsocryl (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IC ICM C08J003-00  
ICS C08F291-00

CC 37-6 (Plastics Manufacture and Processing)

IT 132893-93-7, Norsocryl  
RL: USES (Uses)  
(for attenuator material for acoustic waves)

L227 ANSWER 51 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:480638 HCAPLUS <<LOGINID::20060124>>

DOCUMENT NUMBER: 113:80638

TITLE: Trifluoromethyl-terminated polymer releasing agents for silicone adhesive tapes

INVENTOR(S): Takahashi, Shuichi; Domoto, Tadanori; Takahata, Eiji

PATENT ASSIGNEE(S): Nitto Denko Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
-----				

JP 02060980 A2 19900301 JP 1988-213325

1988  
0826

PRIORITY APPLN. INFO.: JP 1988-213325

1988  
0826

AB The title releasing agents comprise carbon or siloxane main chains with CF<sub>3</sub>-terminated C1-10 fluoroalkyl side chains, at Mw/Nf <500 (Mw = weight-average mol. weight; Nf = number of CF<sub>3</sub> in mol.). A siloxane with Mw 43,000, polymerized from F<sub>3</sub>CSiCl<sub>2</sub>H (I) 130, Me<sub>3</sub>SiCl 5, and H<sub>2</sub>C:CHSiCl<sub>2</sub>H 10 mol, was dissolved in F<sub>3</sub>CPh, mixed with 0.5 phr Pt catalyst, applied 0.5 g/m<sup>2</sup> (solid base) on a 50-μm polyester film, and dried 5 min at 150° to give a separator having peel strength (to silicone-based adhesive tape) 60 g/50 mm and adhesive strength retention (for the peeled adhesive tape, tested on stainless steel) 98%, vs. 600 and 85, resp., for a separator containing MeSiCl<sub>2</sub>H instead of I.

IT 110226-65-8

RL: USES (Uses)

(releasing agents, for silicone-based adhesives)

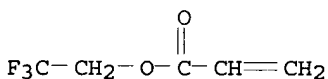
RN 110226-65-8 HCAPLUS

CN 2-Propenoic acid, polymer with 2,2,2-trifluoroethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 407-47-6

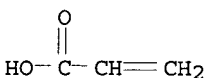
CMF C5 H5 F3 O2



CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09J007-02

ICA C08G077-24

CC 42-10 (Coatings, Inks, and Related Products)

IT **Adhesives**

(pressure-sensitive, silicone-based, releasing agents for, trifluoromethyl-terminated polymers as)

IT 110226-65-8

RL: USES (Uses)

(releasing agents, for silicone-based adhesives)

L227 ANSWER 52 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:200167 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 112:200167

TITLE: Acrylate copolymer compositions as

**pressure-sensitive adhesives**  
 INVENTOR(S): Sasaki, Makoto; Egashira, Ken  
 PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA  
 SOURCE: Eur. Pat. Appl., 7 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 338724	A2	19891025	EP 1989-303655	1989 0413
EP 338724	A3	19910410		
EP 338724	B1	19930210		
R: BE, DE, ES, FR, GB, IT, SE				
JP 01271472	A2	19891030	JP 1988-96656	1988 0419
AU 610367	B2	19910516	AU 1989-31795	1989 0329
AU 8931795	A1	19891026		
BR 8901695	A	19891121	BR 1989-1695	1989 0410
ES 2053984	T3	19940801	ES 1989-303655	1989 0413
ZA 8902835	A	19901228	ZA 1989-2835	1989 0418
PRIORITY APPLN. INFO.:			JP 1988-96656	A 1988 0419

AB A **pressure-sensitive adhesive**, useful for bonding plasticized plastics, even after aging, comprises a copolymer of Bu acrylate (I), an unsatd. carboxylic acid, and optionally  $\geq 1$  copolymerizable vinyl compound, and an isocyanate crosslinking agent to crosslink 10-60% of the polar groups in the copolymer. Thus, I 95, **acrylic acid** 5, Bz2O2 0.02, and AcOEt 130 parts were polymerized at 80-85° for 20 h under N, and mixed with PhMe and Coronate L to form an adhesive. The adhesive was coated on a primed polyester film, dried, and bonded to a plasticized poly(vinyl chloride) film to prepare a test tape showing initial room temperature adhesion 85.0 N/dm and aged adhesion (after storage at 80° for 10 days and at ambient temperature for 1 h) 59.9 N/dm, compared with 83.0 and 13.5, resp., for a similar adhesive composition prepared by copolymer. for 8 h using 0.01 part Bz2O2.

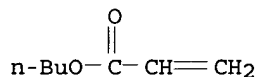
IT 25119-83-9, **Acrylic acid-butyl acrylate copolymer 29960-87-0, Acrylic acid-butyl acrylate-methyl acrylate-methyl methacrylate copolymer 126895-96-3, Acrylonitrile-butyl acrylate-maleic anhydride-vinyl acetate copolymer**  
 RL: USES (Uses)  
 (pressure-sensitive adhesives,

isocyanate-crosslinked, for plasticized plastics)

RN 25119-83-9 HCAPLUS  
 CN 2-Propenoic acid, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

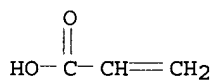
CM 1

CRN 141-32-2  
 CMF C7 H12 O2



CM 2

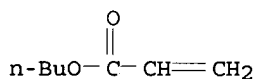
CRN 79-10-7  
 CMF C3 H4 O2



RN 29960-87-0 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

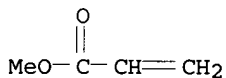
CM 1

CRN 141-32-2  
 CMF C7 H12 O2



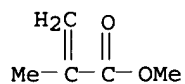
CM 2

CRN 96-33-3  
 CMF C4 H6 O2

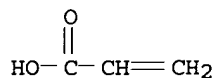


CM 3

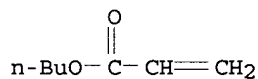
CRN 80-62-6  
 CMF C5 H8 O2



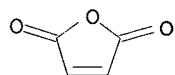
CM 4

CRN 79-10-7  
CMF C3 H4 O2RN 126895-96-3 HCAPLUS  
CN 2-Propenoic acid, butyl ester, polymer with ethenyl acetate,  
2,5-furandione and 2-propenenitrile (9CI) (CA INDEX NAME)

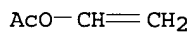
CM 1

CRN 141-32-2  
CMF C7 H12 O2

CM 2

CRN 108-31-6  
CMF C4 H2 O3

CM 3

CRN 108-05-4  
CMF C4 H6 O2

CM 4

CRN 107-13-1  
CMF C3 H3 N



IC ICM C09J003-14  
 ICS C08F220-18; C09J007-02  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 35  
 ST polyacrylate adhesive plastic; acrylic copolymer **adhesive pressure sensitive**; isocyanate crosslinker  
 acrylic copolymer adhesive  
 IT **Adhesives**  
 (**pressure-sensitive**, isocyanate-crosslinked  
 acrylate copolymers, for plasticized plastics)  
 IT 25119-83-9, **Acrylic acid**-butyl  
 acrylate copolymer 29960-87-0, **Acrylic acid**-butyl acrylate-methyl methacrylate  
 copolymer 126895-96-3, Acrylonitrile-butyl  
 acrylate-maleic anhydride-vinyl acetate copolymer  
 RL: USES (Uses)  
 (**pressure-sensitive adhesives**,  
 isocyanate-crosslinked, for plasticized plastics)

L227 ANSWER 53 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1990:169915 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 112:169915  
 TITLE: Ionic conductivity in the poly(propylene glycol)-poly(methyl **methacrylate**)-lithium **trifluoromethanesulfonate** system  
 AUTHOR(S): Svantesson, P. A.; Albinsson, I.; Mellander, B. E.  
 CORPORATE SOURCE: Dep. Phys., Chalmers Univ. Technol., Goeteborg, S-412 96, Swed.  
 SOURCE: Zeitschrift fuer Naturforschung, A: Physical Sciences (1989), 44(12), 1231-3  
 CODEN: ZNASEI; ISSN: 0932-0784  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The temperature dependence of the ionic conductivity in the PPG-rich part of the ternary system poly(propylene glycol)-poly(Me methacrylate)-LiCF<sub>3</sub>SO<sub>3</sub> has been investigated. The highest conductivity values,  $3 \times 10^{-5} (\Omega\text{cm})^{-1}$  at 31° and  $4 \times 10^{-4} (\Omega\text{cm})^{-1}$  at 77°, were obtained for samples which had the properties of a **pressure-sensitive adhesive**. The temperature dependence of the ionic conductivity could be well described by the Vogel-Tammann-Fulcher equation.  
 CC 76-2 (Electric Phenomena)  
 Section cross-reference(s): 52

L227 ANSWER 54 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1990:160678 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 112:160678  
 TITLE: Antiblocking perfluoropolyether coatings  
 INVENTOR(S): McIntyre, Daniel K.  
 PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA  
 SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 339880	A2	19891102	EP 1989-303982	1989 0421
EP 339880	A3	19900314		
EP 339880	B1	19931208		
R: CH, DE, FR, GB, IT, LI, NL, SE				
US 4873140	A	19891010	US 1988-186955	1988 0427
AU 8931369	A1	19891102	AU 1989-31369	1989 0316
AU 614342	B2	19910829		
CA 1330912	A1	19940726	CA 1989-593950	1989 0316
JP 02014278	A2	19900118	JP 1989-107095	1989 0426
KR 9710599	B1	19970628	KR 1989-5499	1989 0426
PRIORITY APPLN. INFO.:			US 1988-186955	A 1988 0427

AB The title coatings, especially useful as release liners for **pressure**-sensitive **adhesive** tapes, are polymerized in situ from oligo(meth)acrylates containing [CF(CF<sub>3</sub>)CF<sub>2</sub>O]<sub>n</sub> segments with number-average mol. weight 800-25,000. The oligomer acrylate C<sub>3</sub>F<sub>9</sub>O[CF(CF<sub>3</sub>)CF<sub>2</sub>O]<sub>10</sub>CF(CF<sub>3</sub>)CH<sub>2</sub>OCOCH:CH<sub>2</sub> was coated (.apprx.70 nm) as a 1% C<sub>2</sub>Cl<sub>3</sub>F<sub>3</sub> solution on a 0.05-mm PET film, dried, and exposed at 30 cm/s to 2 120-W/cm Hg lamps to give a release coating. In testing with an aggressive **pressure**-sensitive **adhesive** tape, this film showed release adhesion 0.5 N/dm and readhesion of the tape to glass 43 N/dm before, and 1.2 and 42, resp., after, being aged for 3 days at 70°.

IT **126288-74-2**  
RL: USES (Uses)  
(release coatings, for use with **pressure**-sensitive **adhesive** tapes)

RN 126288-74-2 HCAPLUS

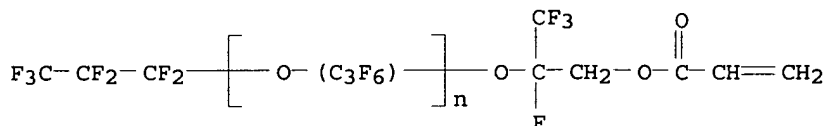
CN Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)],  
α-(heptafluoropropyl)-ω-[1,2,2,2-tetrafluoro-1-[[[1-oxo-2-propenyl)oxy)methyl]ethoxy]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126288-73-1

CMF (C<sub>3</sub> F<sub>6</sub> O)<sub>n</sub> C<sub>9</sub> H<sub>5</sub> F<sub>11</sub> O<sub>3</sub>

CCI IDS, PMS



IC ICM C08F020-22

ICS C09D003-78; C09J007-02

CC 42-10 (Coatings, Inks, and Related Products)

IT **Adhesive** tapes

(pressure-sensitive, release coatings for use with, photocurable perfluorooligoether acrylates as)

IT Parting materials

(release coatings, photocurable, perfluorooligoether acrylate polymers, for use with **pressure-sensitive adhesive** tapes)IT **126288-74-2**

RL: USES (Uses)

(release coatings, for use with **pressure-sensitive adhesive** tapes)

L227 ANSWER 55 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:575740 HCAPLUS &lt;&lt;LOGINID::20060124&gt;&gt;

DOCUMENT NUMBER: 111:175740

TITLE: Peelable **pressure-sensitive adhesives** from storage-stable acrylic polymer emulsions

INVENTOR(S): Iwasaki, Keitaro

PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 01075577	A2	19890322	JP 1987-233192	1987 0917
JP 07084581	B4	19950913		
PRIORITY APPLN. INFO.:			JP 1987-233192	1987 0917

AB Peelable adhesives which do not harden over time, useful for mounting photographs under clear plastic sheets in albums, are aqueous dispersions prepared by neutralizing with volatile amines or NH<sub>3</sub> 100 parts (solids) tacky acrylic emulsion polymers including 0.5-10% carboxy monomers, and also contain 0.05-5.0 parts epoxy silanes and 0.05-5.0 parts compds. having ≥2 aziridinyl groups. Neutralization of the polymers keeps them from reacting with the silanes and aziridines during storage, but when the emulsion is applied to a substrate and dried the amines or NH<sub>3</sub> are driven off, and the polymer is **crosslinked** via the free carboxy groups. 2-Ethylhexyl acrylate 60, n-Bu acrylate 30, and **acrylic acid** 4.5 parts were polymerized in water containing anionic **surfactants**, nonionic **surfactants**

, and (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> to give an emulsion, which was mixed with 0.1 part methyltri(glycidyloxy)silane (I) and 0.5 part (solids) aqueous dispersion of diphenylmethanebis(4,4-N,N-diethyleneurea) to give a **pressure-sensitive adhesive**.

Photograph album pages were coated with the adhesive, dried, and covered with oriented polypropylene films, which showed adhesion (at 23°) 40 g/135 mm initially and 50 g/135 mm after 8 h under a UV lamp, vs. 200 and 250 g/135 mm, resp., without the I, or 200 and 500 g/135 mm, resp., for a com. natural rubber adhesive.

IT 123236-25-9 123236-26-0 123236-27-1

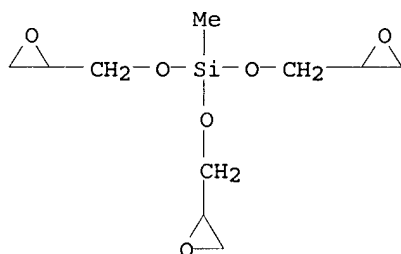
RL: TEM (Technical or engineered material use); USES (Uses)  
(adhesives, formed from storage-stable emulsions,  
pressure-sensitive, peelable)

RN 123236-25-9 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, N,N'-(methylenedi-4,1-phenylene)bis[1-aziridinecarboxamide] and methyltris(oxiranylmethoxy)silane (9CI)  
(CA INDEX NAME)

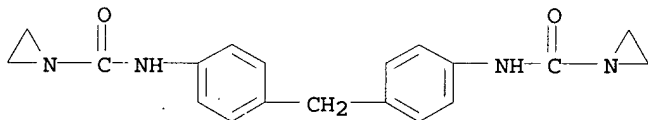
CM 1

CRN 58213-70-0  
CMF C10 H18 O6 Si



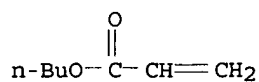
CM 2

CRN 7417-99-4  
CMF C19 H20 N4 O2



CM 3

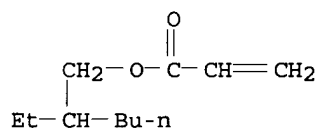
CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 103-11-7

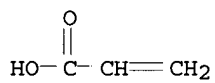
CMF C11 H20 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



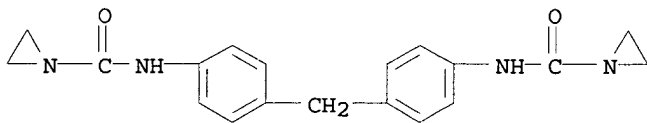
RN 123236-26-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate, N,N'-(methylenedi-4,1-phenylene)bis[1-aziridinecarboxamide], 2-propenoic acid and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 7417-99-4

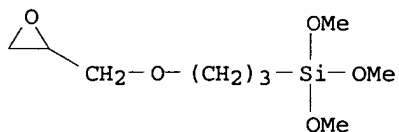
CMF C19 H20 N4 O2



CM 2

CRN 2530-83-8

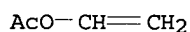
CMF C9 H20 O5 Si



CM 3

CRN 108-05-4

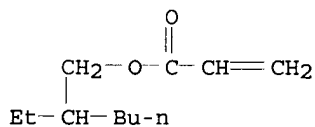
CMF C4 H6 O2



CM 4

CRN 103-11-7

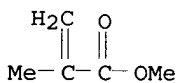
CMF C11 H20 O2



CM 5

CRN 80-62-6

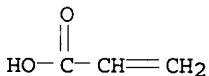
CMF C5 H8 O2



CM 6

CRN 79-10-7

CMF C3 H4 O2



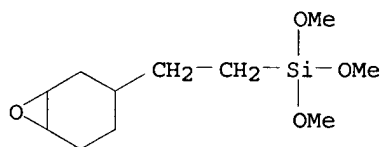
RN 123236-27-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 2-ethylhexyl 2-propenoate, N,N'-(4-methyl-1,3-phenylene)bis[1-  
 aziridinecarboxamide], 2-propenoic acid and trimethoxy[2-(7-  
 oxabicyclo[4.1.0]hept-3-yl)ethyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 3388-04-3

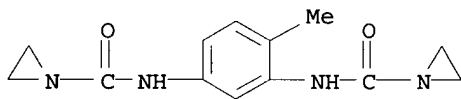
CMF C11 H22 O4 Si



CM 2

CRN 2131-75-1

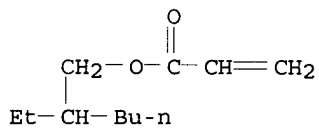
CMF C13 H16 N4 O2



CM 3

CRN 103-11-7

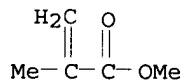
CMF C11 H20 O2



CM 4

CRN 80-62-6

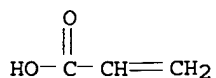
CMF C5 H8 O2



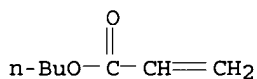
CM 5

CRN 79-10-7

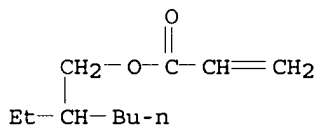
CMF C3 H4 O2



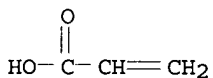
IT 26710-97-4D, neutralized with volatile amines or ammonia  
 30705-21-6D, neutralized with volatile amines or ammonia  
 72108-15-7D, neutralized with volatile amines or ammonia  
 RL: USES (Uses)  
 (emulsions, containing epoxy silanes and aziridines, storage-stable  
**pressure-sensitive adhesives**)  
 RN 26710-97-4 HCAPLUS  
 CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-ethylhexyl  
 2-propenoate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 141-32-2  
 CMF C7 H12 O2



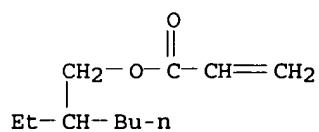
CM 2  
 CRN 103-11-7  
 CMF C11 H20 O2



CM 3  
 CRN 79-10-7  
 CMF C3 H4 O2



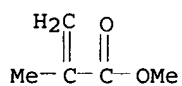
RN 30705-21-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX  
 NAME)  
 CM 1  
 CRN 103-11-7  
 CMF C11 H20 O2



CM 2

CRN 80-62-6

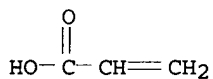
CMF C5 H8 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



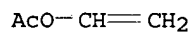
RN 72108-15-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

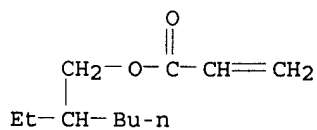
CMF C4 H6 O2



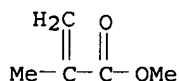
CM 2

CRN 103-11-7

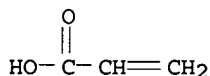
CMF C11 H20 O2



CM 3

CRN 80-62-6  
CMF C5 H8 O2

CM 4

CRN 79-10-7  
CMF C3 H4 O2

- IC ICM C09J003-14  
ICS C09J007-02
- CC 38-3 (Plastics Fabrication and Uses)
- ST **pressure sensitive acrylic adhesive**  
peelable; epoxy silane **crosslinking** acrylic adhesive;  
aziridine **crosslinking** acrylic emulsion adhesive;  
ethyleneurea **crosslinking** acrylic emulsion adhesive;  
photograph album peelable acrylic adhesive; latent  
**crosslinking** acrylic emulsion adhesive
- IT **Crosslinking agents**  
(latent, epoxy silanes and aziridines, for carboxy-containing  
acrylic emulsion polymers neutralized with volatile amines)
- IT **Adhesives**  
(peelable, **pressure-sensitive**, acrylic  
emulsions **crosslinked** with epoxy silanes and  
aziridines, for photograph albums)
- IT Epoxides  
RL: USES (Uses)  
(silyl, **crosslinking** agents containing, for  
carboxy-containing acrylic polymer emulsions stabilized by  
neutralization)
- IT 123236-25-9 123236-26-0 123236-27-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(adhesives, formed from storage-stable emulsions,  
pressure-sensitive, peelable)
- IT 2131-75-1 2530-83-8, 3-Glycidoxypropyltrimethoxysilane  
3388-04-3, 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane  
7417-99-4 58213-70-0  
RL: USES (Uses)  
(**crosslinking** agents containing, for carboxy-containing  
acrylic polymer emulsions stabilized by neutralization)
- IT 26710-97-4D, neutralized with volatile amines or ammonia  
30705-21-6D, neutralized with volatile amines or ammonia  
72108-15-7D, neutralized with volatile amines or ammonia  
RL: USES (Uses)  
(emulsions, containing epoxy silanes and aziridines, storage-stable  
**pressure-sensitive adhesives**)

L227 ANSWER 56 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:455112 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 103:55112  
 TITLE: Emulsion-acrylic **pressure-sensitive adhesives**  
 INVENTOR(S): Chang, Man Chium; Mao, Chung Ling; Vargas, Richard Raymond  
 PATENT ASSIGNEE(S): Avery International Corp., USA  
 SOURCE: PCT Int. Appl., 31 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8500821	A1	19850228	WO 1984-US1265	1984 0810
W: AU, BR, JP RW: BE, CH, DE, FR, GB				
US 4564664	A	19860114	US 1983-522491	1983 0812
AU 8433166	A1	19850312	AU 1984-33166	1984 0810
BR 8407023	A	19850730	BR 1984-7023	1984 0810
EP 153386	A1	19850904	EP 1984-903226	1984 0810
R: BE, CH, DE, FR, GB, LI				
JP 60502010	T2	19851121	JP 1984-503178	1984 0810
JP 07042446	B4	19950510		
CA 1225792	A1	19870818	CA 1984-460818	1984 0810
PRIORITY APPLN. INFO.:				1983 0812
US 1983-522491				A
WO 1984-US1265				A
				1984 0810

AB **Pressure-sensitive adhesives** are manufactured by the two-stage, free-radical copolymn. of 50-95% **soft monomers** [homopolymer glass transition temperature (Tg) <0°] consisting of 5-30% C2-8 dialkyl fumarate and C2-10 alkyl acrylate and 5-50% **hard monomers** (homopolymer Tg >0°) consisting of ≤25% C2-6 alkyl methacrylate and ≤10% C2-8 unsatd. carboxylic acid. Thus, a stirred reaction vessel was charged with water 40, Fe3+ 0.01, NH4 phosphate 0.2, NH4OH 1, alkyl aryl ether disulfonate **surfactant** 2.5, and di-Bu fumarate 15 parts. A second emulsified monomer mixture consisting of water 30, sodium alkyl aryl polyether sulfonate emulsifier 2, 2-ethylhexyl acrylate 62, Me

methacrylate 18, acrylic acid 5, tert-BuOOH 0.3, and dodecyl mercaptan 0.06 parts along with a reducing agent consisting of 20 parts water and 0.3 parts Na formaldehyde sulfoxalate was added portionwise to the reactor at 40°. When the temperature reached 45° the balance of the emulsified mixture was added at 2 parts/min while adding the initiator charge at 0.3 parts/min. The temperature was maintained at 45-50° until after the emulsified monomer mixture was added, then the temperature was increased to 60° for .apprx.1 h while the remaining Na formaldehyde sulfoxalate solution was added at 0.1 parts/min. The cooled adhesive on Kelex G vinyl plastic had 180° peel 17.4 N/25 mm with panel failure, compared with 18.0 N/25 mm with panel failure for the same adhesive **crosslinked** with chromium acetate [1066-30-4].

IT 97385-04-1P 97385-05-2P

RL: PREP (Preparation)

(adhesive, pressure-sensitive,  
manufacture of, by emulsion polymerization)

RN 97385-04-1 HCAPLUS

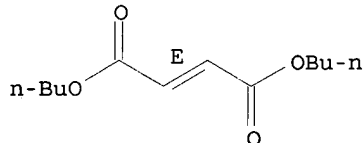
CN 2-Butenedioic acid (2E)-, dibutyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 105-75-9

CMF C12 H20 O4

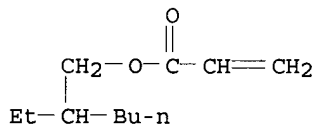
Double bond geometry as shown.



CM 2

CRN 103-11-7

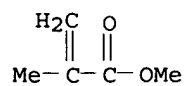
CMF C11 H20 O2



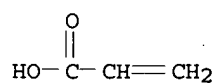
CM 3

CRN 80-62-6

CMF C5 H8 O2

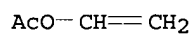


CM 4

CRN 79-10-7  
CMF C3 H4 O2

RN 97385-05-2 HCAPLUS  
 CN 2-Butenedioic acid (2E)-, dibutyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

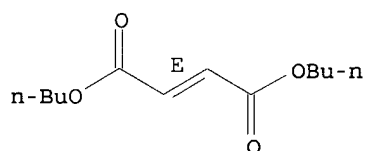
CM 1

CRN 108-05-4  
CMF C4 H6 O2

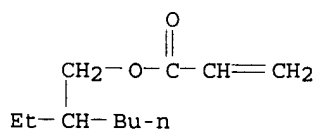
CM 2

CRN 105-75-9  
CMF C12 H20 O4

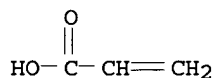
Double bond geometry as shown.



CM 3

CRN 103-11-7  
CMF C11 H20 O2

CM 4

CRN 79-10-7  
CMF C3 H4 O2

IC ICM C08F018-14  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST emulsion polymn acrylic polymer adhesive; **pressure sensitive adhesive** acrylic polymer; butyl fumarate acrylic copolymer adhesive  
 IT **Crosslinking** agents  
 (chromium acetate, for acrylic copolymer **pressure-sensitive adhesives**)  
 IT Polymerization  
 (emulsion, of **acrylic acid** with di-Bu fumarate, ethylhexyl acrylate and unsatd. ester, for **pressure-sensitive adhesive** manufacture)  
 IT **Adhesives**  
 (**pressure-sensitive**, acrylic copolymers as, manufacture of, by emulsion polymerization)  
 IT **97385-04-1P 97385-05-2P**  
 RL: PREP (Preparation)  
 (**adhesive, pressure-sensitive**, manufacture of, by emulsion polymerization)  
 IT 1066-30-4  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**crosslinking** agents, for emulsion-polymerized acrylic adhesives)

L227 ANSWER 57 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1983:423753 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 99:23753  
 TITLE: **Pressure-sensitive acrylic adhesive**  
 INVENTOR(S): Ohmori, Akira; Tomihashi, Nobuyuki  
 PATENT ASSIGNEE(S): Daikin Kogyo Co., Ltd. , Japan  
 SOURCE: Eur. Pat. Appl., 18 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 75191	A1	19830330	EP 1982-108260	1982 0908
EP 75191 R: DE, FR, GB	B1	19860611		
JP 58045275	A2	19830316	JP 1981-143342	1981 0910
JP 01057709	B4	19891207		

US 4504642 A 19850312 US 1982-416161

1982  
0909

PRIORITY APPLN. INFO.:

JP 1981-143342

A

1981  
0910

AB **Adhesives** useful in **pressure-sensitive** tapes and having good oil and water resistance contain acrylic polymers with  $\geq 45\%$  F, intrinsic viscosity 0.1-1.0 and glass transition temperature (Tg)  $< -5^\circ$ . Thus, 100 mL BuOAc, 30 g pentafluoropropyl acrylate (I), and 0.1 g Cl<sub>2</sub>H<sub>2</sub>5SH were heated at  $60^\circ$  while 0.15 g AIBN in 10 mL BuOAc was added dropwise. Heating 10 h, gave I polymer [29036-65-5] with Tg- $26^\circ$  and intrinsic viscosity 0.56 dL/g. I polymer (20 g) in 80 g 2:1 C<sub>2</sub>Cl<sub>3</sub>F<sub>3</sub>-BuOAc was coated on corona-treated, 150- $\mu$  polyester film and dried to give a 25  $\mu$  coating. The had  $180^\circ$  peel strength (300 mm/min) 1.55 kg/5 cm. After 2 h in spindle oil, ligroine, kerosine, or H<sub>2</sub>O, adhesion retention was 95, 85, 91, and 100%, resp.

IT 29991-80-8 86217-02-9 86227-82-9

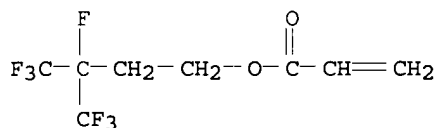
RL: TEM (Technical or engineered material use); USES (Uses)  
(**adhesives**, **pressure-sensitive**, oil- and water-resistant)

RN 29991-80-8 HCAPLUS

CN 2-Propenoic acid, 3,4,4,4-tetrafluoro-3-(trifluoromethyl)butyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 45188-02-1  
CMF C8 H7 F7 O2

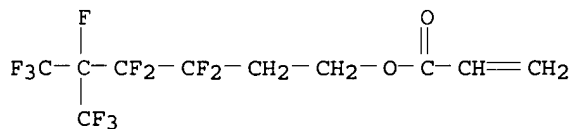


RN 86217-02-9 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,6,6,6-octafluoro-5-(trifluoromethyl)hexyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 86217-01-8  
CMF C10 H7 F11 O2

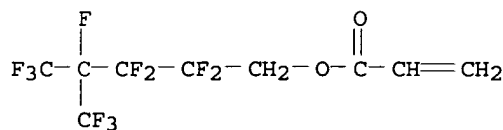


RN 86227-82-9 HCAPLUS

CN 2-Propenoic acid, 2,2,3,3,4,5,5,5-octafluoro-4-(trifluoromethyl)pentyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 86227-81-8  
CMF C9 H5 F11 O2



IC C09J003-14; C09J007-04  
CC 38-3 (Plastics Fabrication and Uses)  
ST fluoropolymer **adhesive** pressure sensitive;  
acrylate pentafluoropropyl polymer adhesive; oil resistance  
adhesive; water resistance adhesive  
IT Acrylic polymers, uses and miscellaneous  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fluoroalkyl group-containing, **adhesives**,  
**pressure**-sensitive, oil- and water-resistant)  
IT **Adhesives**  
(**pressure**-sensitive, fluoroalkyl acrylate polymers,  
oil- and water-resistant)  
IT 25656-08-0 26338-10-3 28602-51-9 29036-65-5  
29991-80-8 86217-02-9 86227-80-7  
86227-82-9 86227-84-1 86227-85-2 86227-86-3  
86227-87-4 86227-88-5 86227-89-6 86227-90-9 86227-91-0  
86227-92-1 86244-39-5  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**adhesives**, **pressure**-sensitive, oil- and  
water-resistant)

L227 ANSWER 58 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1981:595124 HCAPLUS <<LOGINID::20060124>>  
DOCUMENT NUMBER: 95:195124  
TITLE: Unsubbed organic film coated with an opaque  
antistatic backing layer  
INVENTOR(S): Miller, Conrad Erve  
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co. , USA  
SOURCE: Eur. Pat. Appl., 17 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 30352	A2	19810617	EP 1980-107526	1980 1202
EP 30352	A3	19820120		
EP 30352	B1	19840815		
R: BE, DE, FR, GB, LU, NL				
US 4301239	A	19811117	US 1979-100520	1979 1205
JP 56092535	A2	19810727	JP 1980-172537	1980

JP 59005886 B4 19840207 1205  
 PRIORITY APPLN. INFO.: US 1979-100520 A  
 1979  
 1205

AB Hydrophobic, energy-treated polyester photog. film supports are coated with an opaque antistatic backing layer comprised of C black, a polyacrylate and an aziridine crosslinking agent. When the backing layer is cured the aziridine **agent crosslinks** the polymer and also firmly bonds it to the polyester film supports, thus eliminating the need for a conventional subbing layer. Thus, a 30% **Et acrylate-methacrylic acid-Me methacrylate** (29:5:66) copolymer dispersion in H<sub>2</sub>O 57.0, a 32.5% C black dispersion in H<sub>2</sub>O 21.0, a 5% FC-128 (a fluorosurfactant) solution in H<sub>2</sub>O 0.2, trimethylolpropane tris[ $\beta$ -(N-aziridiny)propionate] 1.7, and H<sub>2</sub>O 200.0 parts were mixed to give a slurry, aqueous NH<sub>4</sub>OH added to adjust the pH to 9.7, coated on a 4-mil poly(ethylene terephthalate) film support which had sufficiently C black dispersed therein to give an optical d. of 8 and was biaxially oriented, heat-set at 195-205°, heat-relaxed at 110-130°, and energy-treated on 1 side with an oxidizing flame (propane-air) with a 2 mil doctor knife, air-dried at 90°, and heat-relaxed at 100-105° to give a dry coating having a surface resistance of  $1.4 + 10^5 \Omega/\text{square}$ , indicating that the coating serves as a good antistatic layer. The adhesion, both wet and dry, of the backing layer was excellent.

IT 25133-97-5 79715-93-8

RL: USES (Uses)

(antistatic back layers containing carbon black, aziridine crosslinking agents and, for photog. films)

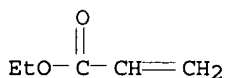
RN 25133-97-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

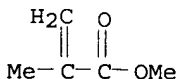
CMF C5 H8 O2



CM 2

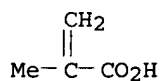
CRN 80-62-6

CMF C5 H8 O2



CM 3

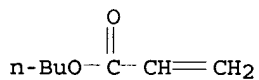
CRN 79-41-4  
CMF C4 H6 O2



RN 79715-93-8 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl  
2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX  
NAME)

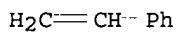
CM 1

CRN 141-32-2  
CMF C7 H12 O2



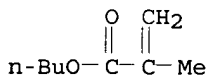
CM 2

CRN 100-42-5  
CMF C8 H8



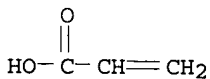
CM 3

CRN 97-88-1  
CMF C8 H14 O2



CM 4

CRN 79-10-7  
CMF C3 H4 O2



IC G03C001-78; G03C001-82; G03C001-87; C08J007-04  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic

Processes)  
 IT 25133-97-5 79715-93-8  
 RL: USES (Uses)  
 (antistatic back layers containing carbon black, aziridine crosslinking agents and, for photog. films)  
 IT 52234-82-9 79679-12-2  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinking agents, for antistatic back layers containing carbon black, polyacrylate and **surfactant** for photog. films)

L227 ANSWER 59 OF 59 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1981:31710 HCAPLUS <<LOGINID::20060124>>  
 DOCUMENT NUMBER: 94:31710  
 TITLE: Release agents for adhesive tapes  
 PATENT ASSIGNEE(S): Daikin Kogyo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

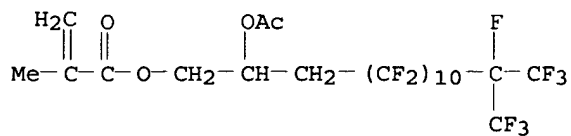
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55104310	A2	19800809	JP 1979-11718	1979 0203
JP 62029472	B4	19870626	JP 1979-11718	A 1979 0203

PRIORITY APPLN. INFO.:

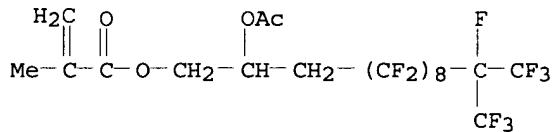
AB Copolymers derived from polymerizable unsatd. compds. containing C1-21 perfluoroalkyl groups, methacrylic acid (I), and hydroxyalkyl (meth)acrylates are useful as release agents for **pressure**-sensitive **adhesive** tapes. Thus, a composition of 5:3:1 mixture of FC(CF<sub>3</sub>)<sub>2</sub>(CF<sub>2</sub>)<sub>n</sub>CH<sub>2</sub>CH(OAc)CH<sub>2</sub>O<sub>2</sub>CCMe:CH<sub>2</sub> (n = 6, 8, and 10) 75, I 37.5, and 2-hydroxyethyl methacrylate 37.5 parts was polymerized in the presence of azobisisobutyronitrile to give a copolymer (II) [76108-83-3]. A polypropylene (III) film was coated with a 0.1% II solution in iso-PrOH and dried to form a 20 mg/m<sup>2</sup> II coating. The peel strengths of a natural rubber-based **pressure**-sensitive **adhesive** tape to the above II-coated film were 810 and 850 g/5 cm before and after 20 h at 65° and relative humidity 80%, resp., compared with 1420 and 1420, resp., for a similar bonding to untreated III film.

IT 76108-83-3  
 RL: USES (Uses)  
 (release agents, for **pressure**-sensitive **adhesive** tapes)  
 RN 76108-83-3 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-(acetyloxy)-  
 4,4,5,5,6,6,7,7,8,8,9,9,10,11,11,11-hexadecafluoro-10-(trifluoromethyl)undecyl ester, polymer with 2-(acetyloxy)-  
 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,13,13,13-eicosafluoro-12-(trifluoromethyl)tridecyl 2-methyl-2-propenoate,  
 2-(acetyloxy)-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15-tetracosafuoro-14-(trifluoromethyl)pentadecyl  
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and  
 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

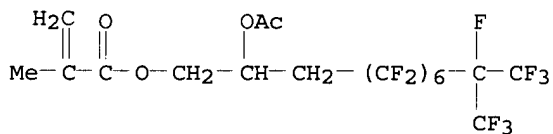
CM 1

CRN 65913-79-3  
CMF C22 H13 F27 O4

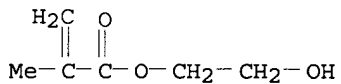
CM 2

CRN 65913-78-2  
CMF C20 H13 F23 O4

CM 3

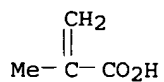
CRN 65913-77-1  
CMF C18 H13 F19 O4

CM 4

CRN 868-77-9  
CMF C6 H10 O3

CM 5

CRN 79-41-4  
CMF C4 H6 O2



- IC C08F220-24; C08F220-28; C08F220-38  
CC 37-2 (Plastics Fabrication and Uses)  
IT Parting materials  
    (fluoroalkyl group-containing acrylic polymers, for  
    **pressure-sensitive adhesive** tapes)  
IT Acrylic polymers, uses and miscellaneous  
    RL: USES (Uses)  
    (fluoroalkyl group-containing, release agents, for **pressure**  
    **-sensitive adhesive** tapes)  
IT **Adhesive** tapes  
    (**pressure**-sensitive, release agents for, fluoroalkyl  
    group-containing acrylic polymers as)  
IT 76108-83-3  
    RL: USES (Uses)  
    (release agents, for **pressure**-sensitive  
    **adhesive** tapes)

=>